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NEWS SUMMARY

GENERAL

Schild's wife -Pope phones

Pope John Panl announced that electronics engineer Rulf Schild was released eight weeks ago.
The Pope also appealed for the release of the Schilds' daughter

ends a carefully observed newa blackout by British media. Hia appeal, he said, was made with

the family's agreement.
Mr. Schild, 55, his wife
Daphne, 51, and bis daughter were seized last year near their Sardinian holiday home.

Olympic boycott

Many Tory MPs may refuse to support the Government's call for a boycott of the Moscow Olympics in today's Commons debate unless it is matched by further trade sanctions against Russia. Back Page

Soames returns

Rhodesia's Governor Lord & A. JOHNSON and Company, Soamea fiew home for brief UK member of the Axel Johntalks on future relations son group of Sweden, has won a between Britain and Zimbabwe contract worth nearly £3m to amid reports in Salisbury that Methodist minister Rev. Canaan Banana will become president line. Page 2 of the republic. Page 2

Confidence vote

Italy's minority Christian Democrat government is expected to face and lose a parliamentary vote of confidence this week, throwing the country into its 42nd government crisis since the War. Back page

Corruption probe

Attorney Geoeral Sir Michael Havers sdmitted that police officers bsd fabricated evidence against criminals to stop them from giving evidence to the Deratioo Couotryman probe into Landon police corruption.

Early leaders

Iran's Republican Party emerged as early leaders from Friday's parliamentary election winning 20 of the 82 seats so far declared. President Bani-Sadr's supporters won seven. Page 2

Moroccan defeat

Moroccan troops appeared to bave surrendered a large part of southern Morocco to West Saharan Poliaario guerrillas after an 11 day battle. The guerrillas claim they killed 2,000

BL sales up BL said the 10 per cent price cut offer on its Maxi cars was

cent for the first 10 days of March compared with February. Ford stays out Former U.S. President Gerald Ford decided not to run against Ronald Reagan for the Republican'a presidential

paying off with sales up 60 per

Republican'a presidential nomination because it might split the party. Page 2 Tito still grave

President Tito, still critical, rallied slightly and his doctors reported signs of an improvement in his weakened heart and a balt to the spreading of pneumonia.

Winner of £100,000 premium bond prize is 6TP 868776 (London), £50,000 prize winner is 18VB 595022 (Manchester) and the £25,000 winner is 4DL 573841 (Cardiff).

Continent wins deal for Irish

BUSINESS

THE IRISH GOVERNMENT is placing orders worth at least Ir£ 200m (about £185.1m) for telephone switching equipment with CIT-Alcatel of France and L. M. Ericsson, of Sweden. The orders, won against fierce inter-Anabelle, 15.

His surprise annonnement to a crowded St. Peter's Square to modernise Ireland's phone network. Back Page

GENERAL CONTROLS OR UK imports to help industry and relieve unemployment were strongly criticised by leading economists at a Bank of England meeting. Back Page

FURTHER RESTRAINTS will not be imposed on clothing and textiles importa, Mr. John Nott, the Secretary for Trade, has indicated. Page 2

O U.S. MONEY SUPPLY: M1-A \$374.5bn (\$374.7bn); M1-B \$391.4bn (\$391.2bn).

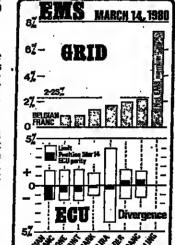
COMPANIES

contract worth nearly £3m to supply the Soviet Union's first soft margarine plant processing

SVENSKA CELLULOSA, Sweden's biggest forest pro-ducts group, reported 1979 pre-tax earnings of SKr 537m (£56.5m) compared with 1978's SKr 273m. Page 16

CURRENCIES

. BELGIAN FRANC fell within the European Monetary System to a level on Friday at which the authorities are expected to take corrective action. Rumours of an imminent devaluation depressed Belgian currency throughout the week and there was heavy intervention in the markets by the Belgian National Rank. On the Belgian National Bank. On Tuesday, the central bank increased Treasury bill rates, pro-clergy Islamic and on Friday the rate paid by an Party emerged as commercial banks for special adders from Friday's advances was raised 31 per cent to 18 per cent. Other rates, including the discount rate of 12 per cent, were unchanged. The French franc and Dutch guilder remained firm, with the French currency returning to the top of the system. Deutschemark required further beavy support from the Bundes-bank as it fell against the



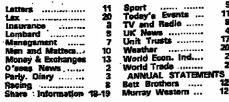
denes the cross-rates from which no dense the cross-rates from which no currency (except the line) may move more than 24 per cent. The lower chart gives each currency's divergence from its "central rate" against the European Currency Unit (ECU), itself a basket of European currencies.

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U.S. economy: Carter in Management: unmapped territory ... 10 Good engineers need management expertise 7 Liverpool: Row over the Lombard: Samuel Brittan waterfront 11 on King Canute and interest

rates -..... 8 Courts: Matters of configures. Economic Package: Editorial comment ... 10 Feature 10

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'Restraint and discipline' need stressed

Carter awaits 'risk package' reaction

BY JUREK MARTIN, US EDITOR IN WASHINGTON

was nervously awaiting yesterday the reaction of American and world financial markets to the substantive anti-inflation measures unveiled late ол Friday.

UNIVERSITY OF JORDAN

Treasury Secretary, said:
"We're taking the risk of more restraint and more discipline, even though it has some prob-lems in its own right."

Referring to the collapse of the bond markets, which triggered the Government's in-tensification of its anti-inflation programmes, be added: "The changing atmosphere will in due course, and I can't tell you when, bring back the normal operation of those markets."

Mr. Paul Volcker, chairman of the Federal Reserve Board, now more than ever in the front line of the war against inflation, said that the new measures need not necessarily result in another surge I ninterest rates, but were designed to impress on leaders the imperative of reducing their borrowing.

Most analysts expect s further jump in abort-term rates in the immediate future. The prime rate stands at about 181 per cent, varying a bit

BY DAVID SATTER IN MOSCOW

for fabrication yards to produce

oil rigs for use in the Caspian Sea, to two French companies.

signed between Sudoimport, the Soviet foreign trade organisa-

tion, and the French companies,

Entrepose GTM pour les Tra-vaux Petroliers Maritimes and

Union Industrielle et d'Entre-

prises on Friday, represent the first big step by the Soviet Union to improve its offshore oil

exploitation methoda.
With the USSR's onshore oil

The contracts, which were

THE CARTER Administration from bank to bank, and the rowing from the Fed at 13 per monetary authorities are cent and re-lending to commer-nervous about too sharp and cial customers at the higher too sudden a further increase. Mr. Volcker admitted that

a main reason for implement ing the split discount rate At the weekend senior officials rather than applying the 3 per guardedly agreed that risks of cent increase across the hoard was the fear that this could a recession bad probably been was the fear that this could enhanced by the fiscal and credit control package.

Mr. G. William Miller, the dilocating the markets.

Under the new regime the major money centre backs will be charged 16 per cent if they use the Fed'a discount window frequently. The discount window is supposed to he used only to meet exigeocies, but some big banks bave been bor-

prevailing commercial rates.

Package in full, Pages 14, 15 Feature and Editorial Comment, Page 10 Lex, Back Page Japan package soon, Back Page

Mr. Volcker predicted that the curbs on consumer credit, which has been growing at an

The Fed chairman also wrily observed that previous re-atraints on credit had belped the atrength of the dollar.
"We're not doing anything bere," be said, "that is damag-

ing to the dollar."

General reaction to the package has not been marked with enthusiasm. Both business and pancial leaders have claimed that the President's fiscal

Continued on Back Page

MAIN PROPOSALS TO SLOW INFLATION RATE

President Carter's main proposals:

• Government spending cuts of \$13bn-\$14bn. Freeze on Federal employment. Spending cuts across the huard, excluding defence. •\$3bn to be raised by with-

holding tax on interest and dividend payments at source.

Tax of \$4.62 a barrel on imported oil to lift petrol price in U.S. by 10 cents a gallon and raise \$10bn.

1981 Budget in halance without oil tax; possible sur-plus of \$13bn with oil tax. · Wages and prices. Step-up

amouncement of trade sacctions, the Soviet Union has major goal in the 1981-85 five-atmosphere and could open the year plao, now being drawn up.

The Soviet offsbore equipment

market may reach \$24bn in the

The selection of the two

French firms over other inter-

national consortium hidders, including Wimpey, Brown and Root and British Patroleum of

the UK, and a joint Mitsubishi-McDermott's group—both of which are experienced in the offahore field—had particular significance. A Dutch group was

also among the unsuccessful

next decade

bidders.

Soviet Union gives \$118m oil rig

contracts to French companies

in monitoring of voluntary wage and price guldelines by trebling staff of Council on Wage and Price Stability.

Commission to study ways of increasing U.S. industrial

efficiency.

Penalty discount rate of 16 per cent for big banks which borrow from the Federal Reserve too frequently. Basic rate remains at 13 per cent. Pressure from Fed on banks to ent rate of growth voluntarily in lending activities to below 9 per cent this year, and give priority in lending to productive sectors

It may reflect Soviet reluc-

participation in Soviet offshore

oil development. The Russians

want to develop their offshore

Sakbalin Island in the Sea of

The agreement includes two

contracts for a fabrication yard

in Baku to make oil rigs to be

used in waters with a depth of

200 metres, and one contract for equipment to be used in a

Soviet-built yard at Astrakhan

where "modules" for the rigs-

oil and gas resources in the Barents Sea, Siheria and off

Okhotsk.

• Imposition of 15 per cent non-interest-bearing special deposits with the Fed nn certain types of consumer credit, incloding credit cards.

• An increase from g to 10 per cent in the banks' marginal reserve requirements and reduction in the base from which those requirements are calculated.

 A 15 per cent non-interestbearing special deposit requirement on any increase in mnney market mntual fund assets, to curb growth of this

living facilities and diving

equipment - are to be attached

The contracts, signed in a

eremony attended by Mr.

Nikolai Patolichev, the Soviet Foreign Trade Minister, and Mr.

S. Orudzhev, Minister of the Gas

Industry, were expected to be followed by the signing of two

more contracts with the French companies — for heav equip-

ment, mainly lifts and giant

cranea and submersible barges for transporting the rigs —

which may be worth about

to them.

cent in the last two months, would be "broadly felt." The main reason wby the U.S. economy has avoided a recession over the last year has been the extraordinary resili-ence of consumer spending.

however.

British Steel's usual produc-tion level of more than 1m

facturing production.
So, if the loss of BSC output

The latest official reports on the strike's effects show that

Most buyers overcoming steel strike

BY ROY HODSON

A NEW assessment of the effects of the stecl strike being studied by the industry and Government departments indicals that, after 11 weeks of the stoppage, British industry has arranged sufficient alternative sourcing roughly to halance the absence of the British Steel Corporation from the market.

Theoretically the strike could continue indefinitely without tangible damage being caused to Britain's industrial production. Whiteholl, the steelmakers and the employers' hodies all have reservations about making such a claim,

The output of manufacturing industry (excluding British Steel) has been running at about 3 per cent below pre-strike forecasts in recent weeks. The strike is probably the main reason for the fall, but neither industry nor Whitehall helieve it is the only reason.

Priftish Steel's usual anadys.

tonnes of finished steel products a month—worth up to £300m at retail prices—represents 2 per cent of Britain's total manu-

is added to that of other manufacturing industry, the strike can he hlamed for causing a loss of up to 5 per cent in industrial production.

private-sector .steelmakers are maintaining good deliveries and that picketing of their works is on Wednesday at a meeting of light, except in isolated all unions involved.

Instances.
Steel-using industries are showing ingenuity in making the best use of the supplies they are receiving. The reports say there has been no deterioration in the past agenth in the quality of the steel delivery services by road transport operators.

Imports are being bampered at a few ports by restrictions on handling steel, but most orders placed with Europeae Community mills and third world countries are being delivered. On supplies to the motor industry, one official report comments: "While vehicle assembly is in some difficulty in some places it is usually for some more pressing reason than the steel strike."

An indication that steel continues to be relatively plentiful is that traders are not asking "pirate 'prices." In contrast, many deals are being done below BSC list prices.

Philip Bassett writes: Negotiates are being done below BSC list prices.

ators from the Iron and Steel Trades Confederation, the main union involved, will meet today to hear a report from Mr. Bill Sirs, general sceretary, on the negotiations last week with BSC.

The meeting, to he followed tomorrow by a meeting of the union executive, will consider the idea favoured by ESC of putting the present pay offer to a ballot ballot,

Union officials stressed yesterday, however, that it would be only one of the options under consideration. Calls to intensify the strike are likely to he made

Massive spending on energy forecast

BY RAY DAFTER, ENERGY EDITOR

FUEL INDUSTRIES will have to spend between £950hn and meeting the energy needs of non-communist countries over the next 20 years, according to

Shell pointed out that these costs, in 1980 prices, would cover only the development of energy at the point of produc-tion. Further "vost sums" would be needed for the transportation, processing and distri-bution of fuel and electricity.

The estimates, published in

Shell World, indicate that noncommunist world energy requirements could increase from the current level, equivalent to nearly 95m barrels a day of oil, a study by the Royal Dutch/ to between 140m and 160m Shell Group. by the turn of the contury.

Shell sees hydroelectricity

solar power, nuclear energy : coal each accounting for bigher proportion of energy supply in the year 2000. Where Shell sees the money being spent:

Continued on Back Page

Government expected to favour hybrid monetary control plan

sbort-term interest rates, will be are likely to be scrapped within proposed towards the end of the next few months.

The main proposal is likely to

pected to say the Government bas not yet heen persuaded of the advantages of moving to a fully-fiedged monetary base system in which the Bank of England would directly control the cash base of the banks. Under this system, interest

rate changes would be auto-matic and rates would probably become more volstile. Instead, the Government is likely to favour a bybrid system in which it retains some discretion over interest rates but in adjustment to correct divergences from the desired path of

monetary growth. This could mean more free the City by the Bank. quent changes in the cost of The papers will be consulquent changes in the cost of overdrafts than at present, tative but firm decisions about though there is generally a the balance of changes will be desire to minimise the impact indicated. Affected parties will change less likely.

CHANGES in the present system of monetary control, resulting in greater flexibility of growth of the banks' operations practice.

Government consultative docu- involve a redefinition of the reserve assets ratio in order to The paper will discuss a make it a more effective on umber of options, but it is exmake it a more effective control At present, banks are obbjed

to keep at least 121 per cent of total deposits in the form of reserve assets, ranging from balances at the Bank to giltedged slock with maturities of less than a year.
This range of assets may change and the ratio could be varied for different sizes of

banks. The key question is whether new and shorter-dated government securities will be issued. The subject will be discussed which there is a prompter io a Treasury paper, with techmical annexes, and the detailed proposals will be made available

enauring monetary control and that what mattera is the right level of public sector borrowing and interest rates. The main issues have been the extent to which the system

rate policy. dilemma for the Government has been increased by the rise in interest rates last November and by the recent sbortage of money market liquidity which has been relieved by the Bank in order to prevent a further rise in

The possibility that Minimum separately and circulated within Lending Rste might bave had to rise further in recent weeks if a fully automatic monetary system had been in operation has made such a

Cigarette adverts agreement near

BY DAVID CHURCHILL, CONSUMER AFFAIRS CORRESPONDENT

advertising are expected to be cresse in tobscco duty in next finalised this week at a meeting week's Budget. finalised this week at a meeting between the Department of

The negotiations bave taken for a total ban on all cigarette nearly three months and the solvertising except inside shops.

exact details of a voluntary But the new agreement. exact details of a voluntary But the new agreement as a way round the existing agreement are still to be worked which will replace the voluntary advertising curbs, is to be reout. But Ministers would like to one in force for the past three publicise the agreement either years, is almost certain to mean before or at the same time as the end of cigar and tobacco

NEW CURBS on cigarette announcing the expected in-advertising on television. The Department of Health is to accept a tougher warning on

The tobacco companies are also understood to be prepared Health and the tobacco com-panies. understood to have had to back-cigarette packets about the track from its original demand dangers to health of smoking.

Sports sponsorship by tohacco companies, which has been used negotiated later this year. Much tighter controls are expected to



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To: David Williams, North West Industrial Development Association, Stazennuse House, Snizennose Smett, Manchester M25 AZ booklett...The Lices'about North West England and details of Government grants and other recently oc Tale Company بحبرالله. North West Industrial Development Association

New impetus to Mid-East initiative

Valery Giscard tion. d'Estaing of France may give extra impetus towards a oew Middle East peace initiative by the European Community, and

Relations between the Nine other and the Arab world were election." expected to be one important aspect of last night's talks, in published magazine Monday particular President Giscsrd's Morning that he expected the forthright declaration in favour French leader to lead an inittaof the principle of Palestinian tive aimed at breaking the self-determination and his "Mid-East deadlock." It would self-determination and his "Mid-East deadlock." It would clearly stated support for PLO not have to be conducted within participation in peace negotia-

Chancellor Schmidt has and Israel. already endorsed the call made by President Giscard in the joint French-Kuwaiti communique two weeks ago.

It followed discussions within the EEC led by Britain on the possibility of a move by intensify the vigorous campaign posing weekly top-level meetings three flights a week each the Nine to amend the UN being waged by Israel against in parallel to those of various between Tel Aviv and Cairo.

Lambsdorff

to discuss

Polish debt

of Poland's large foreign debt

and with the general health of

The visit is an important

political sign that Bonn is pre-

despite the Soviet invasion of

The talks were originally

scheduled for January but were

cancelled at short notice, officially because Warsaw had just put forward plans for joint projects which needed closer study.

Officials are vague on the

details of these new projects, but they seem to embrace three

main elements. First, the broadening of export credit guarantees to Poland—and thus

maintaining the impetus o

German trade with Poland. given the increasing wariness

of private banks to provide the nceded credit backing, Second.

Bonn has agreed at the latest meeting of the joint German-Polish economic commission

Polish manufactured goods.

Finally, Germany is particu-larly eager to help exploit Poland's considerable deposits

of raw materials, including copper, vanadium and titanium.

tions, there is Poland's large debt with the West-variously

estimated at between \$17hn and

\$18bn. The Lambsdorff trip is

not expected to produce any

concrete moves forward on this

issue but Poland has clearly

It was revealed last week that

made various soundings to the

Poland has discreetly refinanced

an official French export credit

of over \$312m and agreed to

Politically, Count Lambs

dorff'a viait is in line with

Bonn's view that East European

countries should be treated differently from the Soviet Union. Germany welcomed the

recent Polish call for a Euro-

pean disarmament conference,

which seemed to Indicate that

the East was atill prepared to

talk on arms control, even after

the NATO decision to re-equip

its theatre nuclear forces in

French jobless

FRENCH - UNEMPLOYMENT

rose 0.9 per cent to a seasonally

David White reports from Paris.

The February figures, which

showed an 8 per cent deterioration since the same time last year, marked the fifth consecu-

tive monthly increase in the

numbers of unemployed.
Unfilled vacancies, which passed the 100,000 mark in

adjusted terms increased 3.5 per cent since January and

more than 26 per cent since February last year. This reflected recent reforms aimed

at improving the workings of the National Employment Agency, the Ministry said.

Switzerland's trade deficit rose

to SwFrs 1.1bn in February,

from SwFrs 919m in January

and SwFrs 355m in February

last year, the Federal customs

offices said, Reuter reports from

Berne. This is the first time

the deficit for one month

exceeded SwFra 1bn, the office

Venezuela plans to cut its oil

production by more than 10 per

cent to a daily average of less

Venezuela cutback

Swiss trade deficit

rise to 1.39m

accept much harder terms.

Underpinning these considera-

encourage the import of

East-West relations.

Afghanistan

THE MEETING in Hamburg Security Council Resolution 242 any action by the Nine inter- working parties.

ln an Interview given following his talks with President Gisrard, King Hussein of Jordao said he anticipated fresh efforts enuociation of a more precise by the EEC to bring about a collective stand on the question of the Palestine Liberation settlement which "will not have to await conclusion of yet an-Presidential

> King Hussein told the Beirutthe framework of the Camp David accords between Egypt

King Hussein spoke of hia preference for involving the UN Security Council and both super-powers in the peace pro-

Any new initiative would

between Chancellor Helmut to take account of the principle fering in any way with the Schmidt of West Germany and of Palestinian self-determina- Egyptian-Israeli negotiations on autonomy for the inhabitants of tha West Bank and Gaza Strip.

When be met Mrs. Thatcher in London last week, Mr. Yigael Yadin, the deputy Israeli Prime Minister, argued that any move by the Nine at this mooient could only jeopardise the chance of the U.S. sponsored negotiations being concluded satis-factorily by the May 26 dead line. He described the talks as "friendly and frank."

On Friday, Mr. Yadln also predicted that another infoartite summit like those beld at Camp David would he required if agreement was to be reached.

Tbe Israeli Government, meanwhile, has urged a speed-up in tha autonomy negotiations. Joseph Burg, Minister of the Interior and chief Israeli • Israel and Egypt last night participant in the talks has initialled an agreement setting cabled Mr. Mustapha Khalil, the up a direct airlink between Egyptian Premier, and Mr. Sol Linowitz, the U.S. mediator pro-

Roger Matthews reports from Cairo: Egyptian anger at President Jimmy Carter'a Middle East policies surfaced yesterday in an unprecedanted attack on the U.S. Administra tion by one of President Anwar

Sadat's closest confidants.

Mr. Carter was "indecisive and unable to rally weatern support or confront the Soviet Union," Mr Anis-Mansour, editor of October magazine said in this week's edition. Mr. Mansour's articles are widely accepted as being an accurate reflection of President Sadat's

Mr. Carter's recent volle-face over the U.N. Security Council vote on Israeli settlements in the occupied West Bank and Gaza Strip had caused the world President, be went on. Israel and Egypt last night up a direct airlink hetween them; effective from today, Reuter adds. They will operate

Ford stays out of election race

BY JUREK MARTIN, U.S. EDITOR IN WASHINGTON

MR. GERALD FORD, the former U.S. President, will not be a candidate for the Republican Party's Presidential nomination this year, he dealsred at the weekend.

COUNT OTTO LAMBSDORFF. His decision, after weeks of the West German Economics intense speculation that he would belatedly enter the race, Minister, flew to Warsaw vesterday for high-level talks crucial to Poland which is plagued by reflects the weight of advice slow growth, the effects of a from the party's bierarchy that poor harvest and a crippling debt service ratio. The talks though he might well be the most electable Republican in the are expected to deal with wide-ranging Polisb proposals for new economic projects, the state November general election, als chances of getting the nomination were slim and would be polentially costly.

His hrief statement, issued

from hla California desert home. said: "America oeeds a new President... I have determized that I can best help that cause pared to keep open vital trade links with Eastern Europe by not being a candidate for the President, which might further divide my party. I am not a candidate. I will not became a candidate. I will support the nominee of my party with all the energy I have."

The three remaining con-tenders—Mr. Ronald Reagan, Mr. Joho Anderson and Mr. George Bush all George Bush, all campaigning in Illinois before that State's primary tomorrow, welcomed Mr. Ford's decision.



Mr. Gerald Ford

Logically, Mr. Aodersoo and Mr. Bush should benefit most from the former President's absence, in so far as he would have appealed to what they see and the Cook County political as their prime constituencies on machine, a closer race will the Centre-Left of the Repubersus in the battle for Illinois

Mr. Reagan, the clear favourite for the nomination, stands to gain just as much, since neither Mr. Anderson nor Mr. Bush appear to command the breadth of support inside the party seriously to threaten his campaign to carry the party's banner in November.

Mr. Carter was able to enjoy three more apparently decisive victories over Schator Kennedy in preliminary Democratic Party csucuses on Saturday—in Mississippi, South Carolina and Wyoming. To the two Southern States, be was rolling up mar-gina of more than 10-to-1, while in Wyoming, his lead was put at about three-to-one.

The most critical Carter-Kennedy test to date comes tomorrow in Illools. The Senator's advisers seem more or less resigned to the fact that the President will take the "beauty contest" aspect of the primary there. But they hope that, with the admittedly questlonable assistance being provided by Mayor Jane Byrne of Chicago

Hard-liners winning in Iran poll

BY SIMON HENDERSON IN TEHRAN

THE CLERGYMEN who take a Bani-Sadr has already led to he failed to organise a political tough position on the release of accusations of unfair practices structure to follow up his 75 per the U.S. hostages in Tehran are at polling stations. The Presidential emerging as the early leaders as dent, in response to these results come in from Friday's accusations and conceivably as elections for the 270-member Irantan parliament.

President Abol Hassan Bani-Sodr has also apparently done badly. With 84 results announced, candidates of the hardline Islamic Republican Party had won 20 seats, while his supporters bad won seven. Independents and smaller

partics won three, and the remaining 51 will bave to be decided in a run-off election, as successful candidates need at least a0 per cent of the vote.

a sign of his intentions, yesterday told the official Paris News Agency that the elections would be declared null and vold where there had been malpractice. Ayatollah Khomeini has said

the 270-seat Parliament would decide the fate of the 50 hostages, who bave been held for four and a balf months. The Islamic Republicans still their release to the return of the Shah and his wealth, while Mr. Bani-Sadr has been attempt-The Islamic Republicans' start slitting before next month.

elections, when the Islamic candidate Republican was beavily defeated. Most accusations of malorac-

tice have been made against the Islamic Republicans in Tehran where results are not expected for a few more days, their lists of candidates were said to bave been put inside the polling stations, where only the official list of all the candidates should have been available.

Renter edds from Rome: The Italian Government bas authoring to separate the issues. Ised the supply to Iran of 10 Parliament is not expected to Chinook belicopters and helicopter spares previously blocked strong showing, and the What appears to bave gone to show disapproval of the bold-embarrassment it will cause Mr. wrong for Mr. Bani-Sadr is that ing of the hostages.

Soames flies to London aid talks

BY QUENTIN PEEL IN SALISBURY

of Rhodesia, left Salisbury last relationa with the new Admininight for London, for talks with Britiab Government colleagues on aid for the future independent Zimbabwe, as reports in Salisbury suggested that his successor as titular Head-of State would be the Rev. Canago Banana, a Methodist mioister from Bulawayo and a former political detainee.

The departure of the Governor the departure of the Governor for three days of talks, s sigo of growing coofidence in the post-election stability in Rhodesia, comes as Mr. Mugabe is facing a further round of important decisions on which senior civil servants to choose to bead bis new Ministries.

Lord Soames' talks with Lord Mrs. Thatcher's Cabinet, will

stration, including military aid, diplomatic training, and assist-ance with the reorganisation of the Rhodesian broadcasting services.

The expected appointment of the Rev. Banana as the future State President has been rumoured for some time in leading supporter of Mr. Mugabe from Matabeleland, bome of the minority Ndebele language group, who failed to win a seat in Parliament in the

He bas been detained on Carrington, British Foreign Bishop Abel Muzorewa, the out-Secretary, and other members of going Prime Minister, and subsequently as a leader of the advice of the Prime Minister.

LORD SOAMES, the Governor cover the whole range of British internal movement supporting Mr. Mugabe.

The appointment of the President must wait for the formation of the Senate, the proposed upper bouse, for which 34 of the 40 members will be elected on Wednesday. The supreme, although only titular position, is filled by an election by the House of Assembly and the Senate sitting together. Final nomination day for the senate is today and the four electoral collegea will sit on Wednesday.
The 20 white members of

the assembly will elect 10 senators, the 80 black MPs will elect 14, and the councils of several occasions since 1975, chiefs of Mashdwaland and both initially as a supporter of Matabeleland five each. The Bishop Abel Muzorewa, the out- remaining aix will be nominated hy the President on the

U.S., China hydro-pact

U.S. and Chioese officials signed signed a protocol with the an agreement at the week- Chioese under which America end which opens the way for agreed to assist in the developlarge-scale U.S. assistance in the development of China's hydropower iodustry.

technical Under the co-operation agreement, U.S. hydropower experts will visit China later this year to advise on the construction of a number of hydro-electric sites. These include the Three Gorges project on the Yangtze River and the Hongshui River scheme in

Guangxi Province. The U.S. delegation, led by Mr. S. David Freeman, chairmao of the Tennessee Valley Authority, bas been visiting China for the past few weeks

ment of China's noder-utilised hydro-electric potential. Mr. Mondale also notified tha Chinese that America was prepared to provide up to \$2bn io

bank loans for approved projects. It was premature to suggest that China would use these funds to develop hydro-electric projects, the official azid. The Exim Bank had not yet cleared formalities which would allow it to arrange finance for any pro-

China aoon to discuss such ararngements. Among the American utilities party to the agreement is the

iects. Bank officials would visit

Former Uganda leaders may fight elections

NAIROBI -Godfrey Binaisa of Uganda has aaid that Dr. Milton Obote and Mr. Yusuf Lule, the two former presidents, were welcome to return home to contest the Ugandan elections. Radio Ugaoda said yesterday.

The radio, monitored in Nairobi quoted Mr. Binaisa as saying the ruling National Liberation Front did not fear contesting elections, due to be held by June 1981, and called on former leaders in exile to return in time to campaign. Dr. Obote said in Dar-es Salaam on Wednesday that he would return to Uganda to con-

nations' friendahip. test elections there as soon as they were announced. Mr. Lule

resuming gas exports to Russia

By Simon Henderson in Tehran

IRAN IS delaying resumption of gas exports to the Soviet Union after pipeline breakages, as a lever for obtaining a higher price for the gas, in current negotiations.

Mr. Ali Akhbar Moinfar, Oil Minister, said in Tehran yesterday that the talks had been cut off twice during the past week. After the repairs, maintenance" may continue untii the negotiations are complete_

In the Tebran talks, Iran is sking for a five-fold increase in the present price of 76 cents per 1,000 cu ft, the oll minister said. There was a 30-40 per cent difference hetween the Iranian position and what the Soviet Union was prepared to pay. The gas exports flow along

the Iga-I pipeline to the Sonthern Soviet Republics. Before the Iranian revolution, the contract used to earn Iran about \$270m a year.

In an indication that Iran sill wanted to sell gas to the Soviet Union in future, Mr. Moinfar said work was going ahead on a section of the Igat-2 pipeline which had formerly been part of a swap arrangement involving Iranian gas to the Soviet Union, and Soviet gas being sold to

A 410 km section was being built to connect the Kangan gasfields in the south with Igat-1 he said, and part of the gas would be exported, pre-sumably to the Soviet Union. Igat-2. as a separate project, has aiready been cancelled. On Iran'a oil policy, the Oil Minister said the country was considering raising this week the premium it applles in contracts above Iranian official price of \$31 a

Italy, Brazil consider fighter deal

By Diana Smith in Brasilia HIGH-LEVEL talks are in the offing that could lead to joint Italy Brazil production at Embracr, Brazil's Governat Embraer, Brazil's Government run aircraft mannfacturers, of the sophisticated new AMAX jet fighter now being developed by Aeritalia and Aermacchi, according to diplomatic officials.

Co-production would involve some measure of Italian financing, technical assistance to Embraer and, possibly, components.

possibly, components.
The Brazilian-made version

of the AM-X would he available for the Brazilian Air Force and for export to Latin America. General Franco Ferri, vice-

chief of staff of the Italian Air Force, and three senior Italian Air Force generals begin visits to Embraer today and official talks with their Brazilian Air Force counter-

Aeritalia, wblch is controlled hy Fiat; and Aermacchi are hoping to sell the Italian-made version of the AM-X to NATO, as well as the Italian Air Force.

Belgrade exports Yugoslavia plans to increase

exports to Britain this year by 15 per cent compared with its \$80m exports in 1979, Renter reports from Belgrade. An agreement between Yugoslavia and the European Common Market, initialled last month, which gives Yngo-slavia broad export facilities. would help to offact the country's large trade deficit with Britain, Yugoslavian officials sald. Yugoslav officials said. Yugosiav imports from Britain last year reached \$337m, of which only 23.7 per cent were covered by its exports to Britain.

Iran delays | Nott rejects added limits to textile, clothes imports

and cotton, has made a strong ties now being caused by the defence of the existing arrange high value of sterling, by ments which he claims offer changes in fashinn and technomore comprehensive protection logy and by low and falling for the textile industry than at demand for some products. He any other time io its history. goes on to say that none of He also challenges the industry these problems makes it sensible to back up its claims of alarm- for the UK to undermine the ing growth in fraud, dumping, established rules governing its and other unfair practices by trade relations with the rest of and other unfair practices by auppliers to the UK market

seek any further tightening of have been pointing out that ability to continue to export," restraints on imports of textiles and clothing into the UK.

Mr. Nott, replying to a letter the pressure on the industry in Government's commitment to the pressure on the industry in Government's commitment to the pressure on the industry in the pressure of t

MR JOHN NOTT, the Secretary ping up its campaign for further harriers to contain imports from of State for Trade, has given measures to deal with the abroad we have to give the of State for Trade, has given measures to deal with the abroad we have to all a firm indication that the present crisis. In Yorkshire, closest possible attention to the Government is not prepared to wool textile industry leaders impact of such action on our continue to export,"

TOTAL SAME

Mr. Nott. replying to a letter the present of the present from Mr. Ben Ford and Mr. Lancashire is being described as maintenance of the present Nicholas Winterton, chairmen the worst for 40 years.

CATT Multi-Fibre Arrangement contemporalismentary groups on wool that he recognises the difficult of the bilateral agreements contemporalismentary groups on wool that he recognises the difficult of the bilateral agreements contemporalisments of the present the worst for 40 years. maintenance of the present tained within it. He warns, however, that it would not be possible to negotiate any cutback of existing quotas on the grounds that this would be contrary to the EEC's international obligations and would be unlikely to command support from the EEC Commission and other member States.

ne world.

An early statement on the 'Millons of jobs depend on possibility of introducing comwith firm evidence, stating that with firm evidence, stating that the Government will take up any cases that can be substantiated.

The reply, released today, is certain to dlaappoint the industry which has been steppulsory origin marking for certain consumer goods, includ-

Scotch subsidy pressure on EEC

BY GARETH GRIFFITHS

THE GOVERNMENT is to step up pressure on its EEC partners in an attempt to break a seven-year deadlock over Scotch Whisky export subsidies amounting to between £42m and £44m.

The amount, which is increasing at the rate of £20m per year, is allocated to compeosate for the higher cereal prices inside the Community. It is payable on the whisky exported outside the EEC. The Scotch Whisky Association puts the proportion of whisky exports outside the EEC at between 65 and 70 per cent of total production.

Ministers have already indicated to the Commission and the Council of Ministers their Director General of the General irritation at the delay in the payments which will be activated by the Introduction of a common alcohol policy. How-ever while the EEC maintains a breakthrough could come by the end of this year, the Government is sceptical.

lach, the EEC Agriculture EEC Court of Justice in Luxem-Commissioner. There is some speculation in way for this move as both Whiteball and Brussels that the whisky and cognac have been Government wants the whisky declared agricultural products exports to be included under Refunds for maize, groats and the cereals subsidies and price meal have been paid to the

aintenance. brewing industry, for example.

The recent decialon by the under the cereals regime.

No GATT head decision

BY BRIJ KHINDARIA IN GENEVA MR. ARTHUR DUNKEL Switzerland's chief delegate to likely to emerge victor in a race for the job of Mr. Olivier Long,

Agreement on Tariffs and Trade (GATT). Mr. Long's term expires on May 5. Following a just concluded first round of negotiations at the level of beads of delegations, Mr. Dunket, whose candidacy

Intense private hargaining is expected in coming weeks, and the recently concluded Tokyo delegation chiefs will meet round trade negotiations, is again early next month to again early next month to

Mr. Dunkel's main rival is Mr.

bourg on February 27 opens the

Patrick Donovan, currently Australia'a Ambassador to the Paris-based Organisation for Economic Co-operation and Development (OECD). Mr. Hans Colliander Swedish Ambass dor to the OECD, also remains in ment is sceptical. was announced earlier this the running, while Mr. Rlaus Mr. Peter Walker, the Agri- month, appeared well ahead of Sahlgren, currently head of the the running, while Mr. Klaus culture Minister, is understood other candidates. He is strongly New York-based UN Centre on to have recently pressed the backed by the European Transnational Corporations, has issue with Mr. Fin Olaf Gunde- Community.

finalise their choice.

SHIPPING REPORT

Coal trades move ahead smartly -

BY WILLIAM HALL, SHIPPING CORRESPONDENT

amount of tonnage available, yards. but brokers report that the underlying tone is extremely buovant.

The rates for transatlantic coal cargoes have risen from \$11.30 per ton to \$13.75 per ton, according to Galbraith Wrightaon, and charterers are now being asked to pay up to \$16-\$18. per ton.

The Japan coal trade is also fairly firm. A 50,000-ton cargo was fixed from Davant, near New Orleans, at \$19.75 per ton, which is fairly indicative of the sorts of rates being charged for Japanese cargoes.

As oli prices rise, the demand for coal is expected to go up years. The Taiwan Power Company, for example, has recently undertaken to import 21m tons of steam coal from British Columbia over a 25-year period beginning 1982 and both Britisb and Jspanese interests have recently signed additional contracts for substantial imports from Australia. At the moment shipowners B

THE COAL trades have started are using conventional bulk active. The C. Y. Tung Group, to move abead smartly. Admit-carriers to transport the coal, at present bldding for Britain's tedly, congestion in America's but specialised coal carrying Furness Withy, is reported to main coal loading area, Hamp-ships may soon start to be have paid \$23.65m for a 1973 main coal loading area, Hamp- ships may soon start to be have paid \$23.65m for a 1973 ton Roads, has reduced the ordered from the world's ship- oll/bulk/ore carrier of 115.000 In the tanker market, rates

> Arabian Gulf, are in semi-layup. over \$1 Im. In the Caribbean market, rates Eastern Seaboard of the U.S., which has increased demand for besting and fuel oil.

Elsewhere. remain depressed at around 30,000 dwt bulk carrier (built Worldscale 30, and many vessels waiting for cargoes in the subject to inspection, for just

British flag operators bave have improved, partly because been in the news of late as a of the bad weather on the result of the number of ships they have sold. But last week, there were reports that undisclosed British interests had In the second-hand shipping bought three liquefied petroleum market, business has been fairly gas carriers for \$15m.

World Economic Indicators

	iN	DUSTRIA	L PROD	UCTION		
. :				% chang		
	Feb. '80	Jan. '80	Dec. 79	Feb. '79	year	Year
U.S.	152.9	152-6	152.2	151.0	÷1.2	1967 = 10
	jan. '80	Dec. 79	Nov. '79	Jan. '79		
UK	112.2	112.5	114.6	105.1	+6.7	1975 = 10
Germany	114.4	130.9	137.4	107.1	+6.8	1970 = 10
	Dec. '79	Nov. 79	Oct. 79	Dec. '78		
France	136.0	134.0	133.0	132.0	+3.0	1970=10
italy	128.7	147.4	157.0	118.6	+8.5	1970 = 10
apan	738.0	138.1	136.7	127.3	+8.4	1975 == 30
Holland	125.9	126.0	123.0	126.0	0.8	1970 = 100
	Nov. 79	Oct. 79	Sept. 79	Nov. 78		
Belgium	124.1	121.8	129.0	125.5	~1.1	1970=10

TAIWAN MISSION TO S. AFRICA

Odd men out strengthen ties

BY BERNARD SIMON IN JOHANNESBURG

THE WEEK-LONG visit to South the chairman of Armscor, the 400,000 tons supplied under the to those bought from Japan. Africa by Mr. Sun Yun-Suan, state-owned arms procurement the Taiwanese Prime Minister, which ends today has underlined the close political ties between two of the world's so-

called leper nations. It has also highlighted a burgeoning economic relationship, whose rapid growth is probably unmatched by any other two countries 9,000 milea Two-way trade between South

Africa and Taiwan soared from R9m (£5m) in 1971 to R120.6m (£67m) in 1978. It almost doubled again last year to around R200m (£111.7m), making Taiwan one of South Africa's top 12 trading partners, and putting it ahead of Israel, Brazil and Australia. These figures exclude arms

and other strategic commodities which, judging by some clues, are a cornerstone of the two Mr. Sun's ititnerary has included visits to military bases, and several high-ranking mill-

ageocy. Rumours of nuclear co-operation bave been fuelled by the signing last week of a R330m contract for the sale of 4,000 tons of South African uranium

to Taiwan between 1984-1990. The uranium deal will help keep the balance of trade in Pretoria's favour. South African exports to Taiwan are more than double the value of imports.

Yellow maize, used by Taiwanese pig farmers as animal feed, is by far the largest export item. Despite the protests of private grain traders, the maize is sold under a direct Government-to-Government contract. This arrange- apply ment will not be changed, the traders bave been told, for political" reasons.

Indeed, the quantities have been steadily increased. The current three-year agreement nation status in terms of a provides for the shipment of special trade agreement in tary advisers were among his 600,000 tons of maize a year, entourage. Significantly, Taiwan roughly one-fifth of South recently awarded official decora. Africa's total export crop and tions to the armed forces and considerably higher than the graphic equipment, are similar penuss.

first contract in 1973. minerals and other raw food processing equipment, conmaterials.

hought 1m tons of coal last customers is the metal products year, as well as substantial quan- company. African Gate and tities of asbestos, iron ore. Fence, which bought almost an copper and steel. South African entire pipe mill from Taiwan. wines will soon be on sale in Taiwan.

Agrement on Tariffs and Trade, pected to extend its Hong Kong South Africa has refused to route to Taipei soon. most-favoured-nation customs tariffs to Japanese pro- accords and a double taxation ducts, for fear of being swamped by cheap imports. But Taiwan, agreements signed by the Taiwhich is not a GATT member, wanese delegation in Cape was granted most-favoured-

Taiwan's major disclosed ex-Other exports are mainly port is machinery, including naterials. ventional and inexepensive
In terms of a recent contract, machine tools and bolt and nut-The Taiwanese power ntility making machines. Among local

The fast growth in trade with Taiwan bas resulted in a rapid Pretoria gives more favour- improvement io communications able treatment to imports from between south Africa and the Taiwan than it does to those Far East. Six shipping lines from Japan, which is a far more operate on this route and all important trading partner in call at Talwanese ports at least money terms. Although Japan once a month. In addition, is a member of the General South African Airways is ex-

> Shipping and air agreement were among the five Town during their visit

FINANCIAL TIMES, published daily except Bundays and bolidays. U.S. subscription rates \$365.00 per annum. Second Cleas postage peid at New York, N.Y., and at additional mailing 1975. Many of its major exports to South Africa, such as textiles, footwear and photo-

الكنامن الأحل

agency Veopress reported. Reuter reports from Caracas. Oil Minister, was quoted as saying the new reduction was caused by "circumstantial market reasons."

Inspecting nyoro-power sites.

The co-operation agreement agreement is the Bonneville Power Authority.

The U.S. Army Corpa of they were announced is living in Britain.

Rental Power Authority.

Corpa of they were announced is living in Britain.

than 2m barrels, the state news

Apr. 22-May 2... International Machine Tool Exhibition-MACH 80 Apr. 28 International Food and Wine Exhibition (06284) Apr. 28-May 1... Audio Visual Exhibition (01-688 7788) Msy 2—5 Spring Motor Cycle Show (04886 74987)
May 2—6 Boat Show (0272 657783)

May 3-5 National Collectors Exhibition (01-629 4917)

OVERSEAS TRADE FAIRS AND **EXHIBITIONS** Current World Photographic Exhibition—WORLD PHOTO (021-705 6707) (until March 21) Current Middle East Business Equipment Show (01-486 1951) (until March 20) Mar. 21—34 International Seasonal Leathergoods—SELEPEL
Mar. 22—26 Confectionery, Chocolate and Biscuits (INTERSUC)

Mar. 22—26 Confectionery, Chocolate and Biscuits (INTERSUC) (01-439 3964)

Mar. 23—31 Spring Fair (01-935 8200)

Mar. 27—Mar. 31 Machine Tool Exhibition—METAV (01-409 0956)

Mar. 27—Apr. 5... British Aviation Equipment Exhhn. (01-215 7877)

Apr. 7—10 World Fabric Fair (0532 469611)

Apr. 15—19 MODEXPO '80: International Ladies Fashion Fair Transport—Expo '80 (01-493 3964)

Apr. 24—24 Hanover Fair (01-651 2191)

Apr. 21—25 World Tobacco Exhibition (0737 68611)

Apr. 21—26 Scientific and Measurement Apparatus Exhibition (INSTRUAMA) (01-235 5422)

Apr. 24—28 Perfumery and Cosmetics Exhibition COSMOPROF

Apr. 29—May 2... Biochemical and Instrumental Analysis Exhibition Apr. 29—May 2... Biochemical and Instrumental Analysis Exhibition (ANALYTICA) (01-486 1951)

May 6—8 Compec Europe Exhibition (01-261 8000) Manich

BUSINESS AND MANAGEMENT CONFERENCES

Mar. 17—21 Brunel Institute: The Effective Organisation (0895 56461) LCCI: Industri. Investment in Tunisia (01-248 4444) Mar. 19—20 CCC: Foreign Currency Assets and Liabilities (01-222 6362) Royal Lancaster Hotel, W2 Msr. 19-21 Gower Conferences: International Insurance Con-Mar. 20 BACIE: The Impact of Microelectronics on Industry and Commerce (01-636 5351)

Mar. 24—25 FT Conference: Business Premises and Profitability Connaught Hall, WCI (01-236 4382)

Mar. 24—25 Law and Business Inc: New Techniques in Hilton Hotel, W1 Mar. 24—28 Law and Business Inc. New Techniques in
Acquisitions of U.S. Companies (01-267 4466) Portman Hotel, W.
Mar. 24—28 Kepner-Tregoe: Decision Making for Senior
Mavagement (0628 38083) Whately Hall Hot
Or Poverty?—the last chance for choice
(01-839 1233).

War. 25 Whately Hall Hotely Portman Hotel, W1 Whately Hall Hotel, Banbury

Substances (01-995 1791)
Mar. 26—28 Frank Jefkins School of Public Relations; Planned Piccadilly Hotel, W1 Press Relations (01-567 2911)

Cannon Street, EC4

NEC, Birmingham

NEC, Birmingham

NEC, Birmingham

Alexandra Palace

NEC, Birmingham

Exhibition Centre, Leeds

Wembley Conference Centre Bingley Halls, Birmingham

Exhibition Centre, Bristol Kensington Town Hall

Harrogate City Hall, Hull

Earls Court

Olympia Wembley Conference Centre

Bingley Hall, Birmingham NEC, Birmingham

other £50.

of view, membership of a group scheme enables him to get his needs, the associations provide cover at a reduced premium. cover abroad to the same level counts are given by the three and pleasure trips, as long as tax burden of the lower-paid main associations for group these are of short duration and has increased despite last year's membership, irrespective of do not entail permanent resi-their being fellow employees. dence overseas,

Growth of private

medical cover

BY OUR INSURANCE CORRESPONDENT

THE NUMBER of people schemes (and those offered by British United Provident Association, Private Patients' Plan and Western Provident Associaper cent of the market) is grow- healthy members. ing again after a downturn in the last decade.

INSURANCE

ren insured the number of he of the order of 4m-5m.

The majority, about 80 per cent of the total, are insured through group schemes arranquite common for the employer to pay premium for the employee's cover, leaving the employee to find the money to

insure his family.

But in the final analysis the question of who pays is academic, for if the employer pays, the premium is regarded as part of the employee's income and aggregated with the rest of his income for tax purposes. And there is no tax relief obtainable on private medical insurance premiums any more than there is on disability or permanent health premiums.

But when the claim has to be msde, subject to adequacy of the financial limits of the particular scheme, the claimant gets his bills paid in full: there is no tax bite.

Claims are met on an indemnity basis: if, for example, the surgeon's fee is £250, while the financial limit of the policy is £300, then £250 is all that is payable—the claimant cannot pocket the

From the subscriber's point

But still larger discounts are insured under private medical available for employee schemes -partly to reflect the saving in administrative cost, partly to reflect the reduction in selection against the associations by tion, which comprise about 98 baving a spread of averagely

For the individual buyer, for the member of a small group, The number of subscribers is medical history normally forms now about 1.5m, and since most part of the information that the of them have wives and child-associations require. But where a medium or larger group is to people who enjoy the benefit of be covered, individual medical private medical insurance must histories are not of underwriting significance.

For the individual buyer the three main associations offer three scales of benefit ged by employers. Financial reflected in three scales of pre-arrangements vary, but it is mium. But when one turns to quite common for the employer group cover, BUPA and Western to pay premium for the Provident cut the options to two: their wider cover is related to the London Teaching Hospital scale, their narrower cover to the Provincial Tesching Hospital scale - though in addition BUPA will meet Nuffield nurs ing home costs if these are higher.

A week in s Nuffield nursing home currently costs about £350 (this is just for the rnomdrugs, medicines and so on are extra) while a week in a London Teaching Hospital can be as much as £550.

Age is a premium factor: brosdly speaking, as in life or disability insurance, the older the person insured, the more he or she pays. Different schemes postulate different age rating groups: Western Provident charges the same for all group members up to 50, and then goes age-related, while BUPA's Bulk Protection Scheme has only two age groups, with 65 as the dividing

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This week in Parliament

TODAY remaining stages.

COMMONS—Debate on Govern- LORDS—Debate on co-operation ment motion calling for boy-cott of the Moscow Olympic

LORDS-Competition Bill, third reading. Motion to Approve Preventation of Terrorism (Temporary Provisions) Act (Continuance) Order SELECT COMMITTEES-Edu-1980. British Aerospace Bill. committee stage. Debate on effective machinary for audit-ing the second stage of the road planning process.

SELECT COMMITTEE — Home Affairs, Subject: The law relating to public order, pro-cessions and public meetings. Witnesses: National Council for Civil Liberties (Room 8, 4.30).

TOMORROW COMMONS - Social Security Bill, remaining stages.

ORDS—Reserve Forces Bill (consolidation measure). Consideration of Commons amendments. Consolidated Fund (No. 2) Bill, all stages. British Aerospace Bill, committee stage. Motion to approve Sonthern Rhodesia (Constitution of Zimbabwe) (Elections and

Bill, second reading. Com-panies Bill, consideration of Commons amendments. WEDNESDAY COMMONS — Social Security Bill, completion of remaining stages. New Hebrides Bill,

Appointments) (Amendment) Order 1980. National Health

Service (Invalld Direction)

between the National Health Service and the independent medical services during the past 30 years. Debate on the need to conserve energy. De-bate on the closing of small

village schools.

cation, Science and Arts. Subject: The funding and organisation of courses in bigher education. Witnesses:

TUC. (Room 6, 9.30 am). COMMONS—Debate on EEC Scottish Affairs. Subject: Cooperation and overlap among the agencies etc., responsible for attracting inward invest-ment to Scotland. Witnesses: Department of Industry, Foreign and Commonwealth Office (Room 12, 10.30 am). Welsh Affairs. Subject: The role of the Welsb Office, and Rules.
associated bodies in developSELECT COMMITTEES—Agriing employment opportunities in Wales. Witnesses: Sir Hywel Evans, Permanent

pm). Foreign Affairs, Sub-ject: The consequences of Soviet expansion for British foreign policy: The Soviet background. Witnesses: Dr. R. Conquest and Professor J. Brickson (Room 15, 10,45 am). Industry and Trade, Subject: Import and Export Trade, Witnesses: CB1. (Room 16, 10.45 am). Public Accounts.

Assistance

Secretary, Welsh Office, and

other officials. (Room 8, 10.30 am and Room 6, 4.15

education. Witnesses: Northern Ireland Department Commerce, Northern Ireland Department of Education. (Room 16, 4 pm). Social Services. Subject: Examination of proposals in Rayner study on payment of benefit and sub-post offices. Witnesses: Sir William Barlow, chairman of the Post Office,

and other officials. (Room 15, 4.30 pm). THURSDAY documents relating to the Common Agricultural Policy and the Community Budget. LORDS—County of Kent Bill, second reading. National Health Service (Invalid Direc-tion) Bill, remaining stages. Debate on Liberal motion to disapprove the Immigration

culture. Subject: Economic, social and health implications for the UK of the Common Agricultural Policy on milk and dairy products. Witnesses; British Multiple Retailers Association; National Food and Drink Federation; Volun-Room 16. 11 am). Home Agairs. Sub-committee on Race Relations and Immigration. Subject: Race Relations and the 'Sus' law, Witnesses: the Home Office. (Room 15,

4.30 pm). FRIDAY COMMONS-Private Members' industry schemes, colleges of

Budget aid to lower - paid urged

BY DAVID MARSH

THE GOVERNMENT should hand of income taxed at a couples and from £6.50 to £10 assist below-average earners by reduced rate and increased child for single-parent families. cutting the tax burden on the lower-paid in the Budget, accordmeasures would cost £2hn. The council says the measures could be financed partly by ing to the National Consumer Council and the Low Psy Unit. The Consumer Council's pre-Budget recommendations call for a package costing £2.2bn, to be spent principally on raising personal tax allowances, child benefits, pensions and maternity

grants. The Low Pay Unit says the

The Consumer Council calls and £2,500 for married couples. bank profits.

This would represent an This would represent an The Low Pay Unit says increase of 10 per cent above extending the income band that needed to privide for charged at the lower 25 per cent inflation. It would free well rate from £750 a year to £2,000 over 500,000 lower-pald workers would reduce the tax bill of the from income tax as well as help- average family by £1.20 a week. ing taxpayers generally.

Child benefits should be raised It suggests an extension of the from £4 to £5 for married benefit.

could be financed partly by lower EEC contributions, by a for increases in personal allow-higher tax taken from North Sea ances to £1,500 for single people oil and by a "windfall" tax on

The unit also recommends a rise of £1.75 a week in child

Financial Times Conferences

European Offshore Conference June 18 & 19, 1980 - London

d smart

The Financial Times will be following up its successful conferences on North Sea Oil with a further examination of the latest developments with special emphasia on the role of the UK and Norway. Aspects of the exploration, production and potential of oil and gas resources in the North Sea will be studied and the implications of the UK and Norwegian work for Europe and world energy problems will be

The New Sri Lanka — Opportunities for Business

The Financial Times has decided that the timing for a conference to examine the official promotional activities for the economic development of Sri Lanka la opportune. The conference will aim to examine the husiness opportunities and incentives offered in those areas of significance to the general economic development of the country. The conference also will present to Sri Lankan businessmen and officials in the public sector, the opportunities offered for strengthening development through oversess

This conference will offer opportunities for businessmen not only to appreciate a wide ranging international view of the Sri Lankan situation but also to meet up with business collesgues and to take advantage of the opportunities to visit areas of economic development in the country.

Telex: 27347 FTCONF G

The Secretary of State for Energy, the Rt. Hon. David Howell MP will be a key note speaker alongside a spokesman from the Norwegian Ministry.

All enquiries should be addressed to: Financial Times Limited Conference Organisation Minster House, Arthur Street London EC4R 9AX

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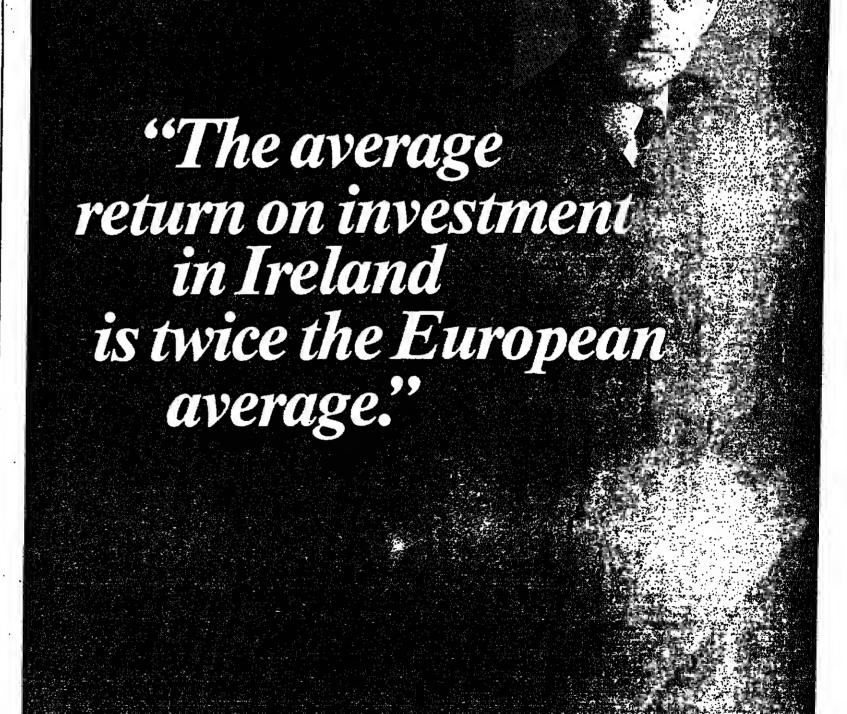
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DA reland & The Irish government's industrial development agency has offices in London at 58 Davies St., London W1Y 1LB. Telephone 01-629 5941.

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LABOUR NEWS

Paintmakers forecast | Import control strategy 30% price rises

BY SUE CAMERON, CHEMICALS CORRESPONDENT

follows an average increase of index of all commodity raw

increases in the cost of raw in distribution, labour and materials. But it warned these packaging costs." attempts were not proving wholly successful.
Raw materials account for

about 80 per cent of the production costs of industrial coatings. a sector which includes car paints, can lacquers, wood finish and powder coatings. Last year the cost of white spirit and mylol rose 53.5 per cent and 38.1 per cent respectively.

Contract prices for naphtha, the oil-based feedstock which is vital to the petrochemicals industry, rose 47 per cent in the seven months to last

paint industry during 1980," the association said.

PRICE rises of about 30 per cent oil-based raw materials used in this year for industrial paints the production of industrial and coatings are forecast by the paints scarcely increesed last Paintmakers' Association, This year, yet the association's cost 29.8 per cent last year.

The association said the rises reflected UK paintmakers efforts to recover "very severe"

materials bad climbed by more than 17 per cent in the past nine months. This figure took "no account of sbarper increases"

> Producers of decorative paints, which account for 54 facturers in raising their prices age rise of 21 per cent for the industry as a wbole.

The Paintmakers' Association

Fees will raise house costs, builders warn

BY MICHAEL CASSELL

THE Government's proposals to House-Builders Federation.

Mr. Ronald King, president of and food and factory inspecthe federation, calculated that torates, the fees, proposed in the current Building (Prescribed Fees) being, it Regulation 1980 and presented tice, a cut to Parliament last week, could add £160 to the cost of a new Parliament and the introduction £25,000 house and said they of the scheme delayed while the discriminate against private house builders.

He suggested the system would mean more local authority monitoring staff. The construction industry

appears united in opposition to the Government's fees proposals and Mr. King's statement forms part of a campaign which is expected to gather momantum. On Saturday, Mr. John Allen, president of the National Federation of Building Trades

Employers, echoed the theme of increased bureaucracy when he predicted disputes between builders and authorities over Lewisham's problems are the assessment of that part of caused by two main roads meet-the building works which lng at the heart of its shopping

per cent of the paints industry. had been even less successful than industrial coatings manuto adequate levels. prices had risen 15.2 per cent in 1979 compared to an aver-

said Industrial paint producers bad experienced difficulties in maintaining voluma sales last year partly because of the impact of 'low U.S. chemical January.

"There is no question that such increases so far back in the raw materials chain will pose severe problems for the pose severe problems for the true in Halfwhistle, Northumtory in Haltwhistle, Northumssociation said. berland, to increase its output
It said the cost of some non of specialist protective coatings.

Mr. Allen told a federation charge fees for building meeting in Blackpool that while inspections and the approval of the industry accepted the need plans will raise house prices for policing of building regula-and increase local authority tions, the Government abould bureaucracy, according to the bear the costs, as in tha case of weights and measures activities

> "This proposal looks like being, in principle and in prac-tice, a costly expedient. We want the issue debated urgently in Parliament and the introduction implications are thought through more carafully."

Lewisham road plan approved

A £12m SCHEME to improve gestion in the London borough of Lewisbam has been approved

centre. The plan provides for a Some authorities, he sald, by-pass and the conversion of were already preparing to hire part of the main shopping more staff or engage consultants street into e pedestrian

rejected by Healey BY PETER RIDDELL, ECONOMICS CORRESPONDENT PROPOSALS FOR a general retaliation, "those who advo-Healey, Shadow Chancellor, in a weekend speech on domestic a strict and international economic Public

In the Lady Morgan Memorial Lecture in Cardiff on Saturday, Mr. Healey attacked both the

Instead Mr. Healey argued organised world economy." that Labour should be loyal to its international traditions, learning from the experience of the Continent, and accepting the some oil-producing countries. Ron Hayward, Labour Party limitations on national freedom and consumers in which the general accretary, said vester of action resulting from any latter would see the continuous countries.

sectors under temporary threat,

Requirement."
Mr. Healey said the real

question was "how to persuade the world to meet the increase Government's concentration on in oil prices without heggar-my-monetary control and the proneighbour deflation and how to tectionist route (favoured, use the henefits of North Seathough he did not say so, by many on the Labour Left), competitive in a better-

Guarantees

He urged the need for of action resulting from any latter would get guarantees of attempt to reach international agreement on the many problams created by the oil crisis.

After noting the cass for selective controls for particular sectors under temporary threat.

be said: "to rely on general industrial countries to develop import controls to make industry more competitive is trying to cure the symptom rather than tha disease."

Even if majorated in persuading the major industrial countries to develop a programme of concerted action to achieve greater trying to cure the symptom convergence in their aconomic performance, as the Labour performance, as the Labour Government did successfully at Even if general import con-trols could be set up without the Bonn summit in 1978."

Domestically, Mr. Healey said strategy of import controls were cate them admit they would not in view of the high level of strongly rejected by Mr. Denis produce an improvement in our savings and the low level of industrial performance without capacity nse, public-sector bor-a strict pay policy and falling rowing should be much bigger Public Sector Borrowing and monetary growth much and monetary growth much higher than the Government is

planning.
It should be prepared to iotervene more actively in the foreign exchange markets, at the price of seeing the money supply rise heyond its present

• Philip Rawstone writes: Unless import controls were introduced on manufactured goods, Britain's textile mills, car and engineering factories would

Such short-term measures should be used as a framework for developing a successful industrial strategy, he told the party's north-west regional council at Blackpool Industrial regeneration required new public enterprises, greater investment, and expanded training schemes, "but none of these measures will work unless, first and foremost, we stop the flood

Car output faces five-year fall

BY KENNETH GOODING, MOTOR INDUSTRY CORRESPONDENT

BP calls for oil tax cuts

BRITISH PETROLEUM, which last week reported after-tax profit in the North Sea, says in profits of £1.6bn for 1979, says a paper that the Government the Government may have to takes up to 83p in the pound of cut tax levels to encourage oil net ravenue from offshore and gas production in the North operations. The money is raised

Sea. as ropalty (12.5p), Petroleum
The Government is known to
be reviewing its offsbore oil tax
Corporation Tax (18p).

of the new car market. Some decline in car produc-tion seems inevitable as export Phillips a markets become closed to UK-

built cars, the brokers say in their latest Motor Review. Output will be hit as Vaux- product. hall and Talbot UK replace

regime. But if there are to be

any changes—and they could be announced in the Budget speech —the effect will be higher,

THE NUMBER of vehicles imported in kits. Britain may fall from 1.07m last from kits may rise from about year to between 700,000 and 80,000 in 1979 (mainly tha \$50,000 by 1985, say stock brokers Phillips and Drew.

The 1985 level described from the production of cars assembled from kits may rise from about from kits may rise from about the \$50,000 by 1985. As well as the \$75,000 by 1985. As well as the \$75,000 by 1985. brokers Phillips and Drew.

The 1985 level depends on BL's recovery, and whether it method, production of kitcan regain a 25 per cent share of the production of the productio by the BL Honda joint vehicle,

> Phillips and Drew say tha impact of these changes on the UK motor component Industry depends on the nature of the

"Those manufacturets mak-British-built cars such as the ing components normally incor-Avenger and Chevette with cars porated in major assemblies—

"North Sen Fiscal Regime,"

BP Briefing Paper; BP, Room SW 02-71, Britannic · House,

assembla cars, will ohviously be harder bit than those making parts which assemblers would be likely to buy in the UK."

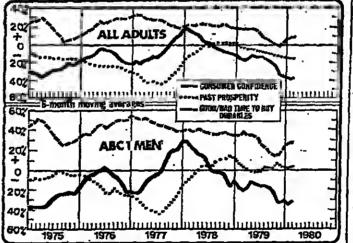
areas." the brokers say.

are imported in kits used to

Items in the last category include seats and Interior trim.
"It seems apparent that roups like Lucas, Associated Engineering and Automotive Products fall into the former category, hence their pash into and other overseas

FT survey of consumer confidence

Rising prices: more blame Government



OPPOSITION to any increase in duty on cigarettas or drink in next week's Budget is a major feature in the latest FT Survey of Consumer Confidence published today.

About 48 per cent of tha 1,000 consumers surveyed Were against a duty increase on either elgarettes or alcohol

Almost a third of consumers surveyed did favour a duty increase, however, with the balance not expressing an opinion. Of those wanting an increase, about 38 per cent felt duty on tobacco should be increased, while 35 per cent wanted an increase in drink

duty.
Analysis of the survey shows men and women from the ABCI social groups—professional and executive workers—were more in favour of duty increases than those in the C2DE social group (manual workers). But women in both social sub groups were mora likely than men to want duty increase.

The results from the survey are broadly in line with the attitude of consumers before the 1979 Budget, although slightly more consumers in 1979—about 51 per cent—were against any increase in duty.
The survey also shows that the fall in confidence since the Conservatives came to power has at last been halted. The monthly index of confidence has fallen ateadily from plus 9 per cent in May last year to minus 46 per cent last month—the lowest figure in the ten-year history of

the survey. This month the index has risen hy 14 perecentage points to reach minus 32 per cent. About 13 per cent of the sample expected conditions to improve, while 45 per cent expected them

-even though it is still at a historically low level - was due to fewer consumers it to fall-giving an index of expecting conditions to worsen plus 41 per cent. This was rather than any real increase in slightly less than last month's confidence. But this is the first record 44 per cent but is still real sign of a change in the a historically high level. mood of consumers since last

The main reason for pessimism

pessimism. There also appears to have been a change in mood about the effects of industrial disputes such as the steel strike. Pessimistic consumera ware less concerned about strikes as a reason for pessimism, while optimistic consumers increasingly saw the

limited effect of strikes as a reason for their optimism. But the main reason for optimism given by consumers was still the nebulous bope that

things must improve." The parts of the survey showing bow people felt in relation to a year ago also revealed an improvement in the perception of past prosperity.

About 23 per cent of the survey felt batter off than a year ago, while 42 per cent felt worse off-giving an index of minus 19 per cent. This was five points better than last month's index of minus 24 per cent.

The changes in the past prosperity and future confidence index have had little effect on the "time to buy" part of the survey, which is still at an unusually bigh level. About 41 per cent felt that now was a good time to huy large consumer durables, while 34 per cent felt it was a bad time. This gave an index of plus 7

per cent, compared to plus 8 per cent last month. This level of consumer willingness to buy may be due to large fears of higher prices later in the year, as well as the fact that large pay awards have

not yet been eroded in real

terms by rising prices. The survey indicates that consumers still expect unemployment to continue to rise. The improvement in the index About 51 per cant felt unemployment would lacrease, while only 10 per cent expected

The Financial Times Survey of Consumer Confidence was carried out between February given by consumers was rising 28 and March 5 by the British prices, cited by 41 per cent of Market Research Bureau. A pessimists. This was slightly sample of 1,034 adults was

BRITISH AIRWAYS staff worldwide are being ancouraged by management to "buy a Tri-Star" by beating their revenue targets for 1980-81. The objective is to exceed the

Airways

in TriStar

campaign

hasic revenue target of £1.9bn sales in 1980-81 by I per cent, or £19m, enough to enable the airline to buy another Lock-heed TriStar airliner. The line has 17 TriStars delivered and 12 on order or

option. The price is about £19m

Highland saving

INCREASED CHARGES planned at the Scottisb Highlands and Islands aerodromes run by the Civil Aviation Authority will not be as big as expected as a result of a Government subsidy of £2.5m a year for 1980-81.

Rolling up

THE NUMBER of commercial vehicles crossing the Channel on roll-on, roll-off ferries increased by 15 per cent in the third quarter of 1979. In the first nine months of that year traffic was up by 17 per cent.

Food fear

RISING DEMAND for "gasohol" may worsen the Third World food shortage, says a report by the Worldwatch Institute in Washington.

Newman costs

TWO DAYS have been set aside in the High Court this week to decide who pays the costs, thought to be between £500,000 and £750,000, of the case of Prudential Assurance v. Newman Industries and others. The bearing today may daal with terms of an inquiry into damages from Mr. Alan Bartlett, Newman's chairman, Mr. John
Laughton, former vice-chairman, and Thomas Poole and
Gladstone China. Mr. Justice
Vinelott said in February that
Mr. Bartlett and Mr. Laughton used trickery and deceit to ensure takeover by Newman of assets and liabilities of TPG.

BY DAVID CHURCHILL CONSUMER AFFAIRS CORRESPONDEN

Whitehall there has been a rise from 32 to 30 per cent in consumers blaming the Government's unions start economic policies for their pay talks

vide for pay increases of 1th per

Some offers were sent out on

Both unions are likely to be able to put the offers to their respective executives later this week. The Inland Revenue Staff Federation which customarily follows the two large unions on pay, will examine their offers this week before considering pay at its own executive, prob-

The third largest union, the Institution of Professional Civil Servants, is unlikely to receive an offer soon since the Pay Research Unit comparability reports, on which Civil Service pay is determined for its grades, were delivered late.

All the offers are likely to include an attempt by the Civil Service Department to pay the awards in stages in order to try to bridge the gap between the 16½ per cent and the average rises of about 18 per cent being shown as due by the Pay

Militant groups, such as the SCPS will approach the negotia-tions determined to resist staging, but there is some dispute among the unions as to bow the maximum obtainable benefits

tomorrow to consider their response to the cash limit.

Foundrymen may review 1979 hours agreement

BY PHILIP BASSETY, LABOUR STAFF

PRESSURE TO prematurely reduction in working hours. reopen negotiations on a shorter Two "deplore" progress made working week agreement will be on the issue so far and "insist on the insist of the insist on the insist of the insist on the insist of the insist on the insist on the insist of the insis annual conference of the Amal- 1980." gamsted Union of Engineering Ano Workers' foundry section.

year's national engineering to seek "the immediate imple-

ndustry dispute. The settlement, particularly the provision to reduce the industry's working week in 1981 engineering employers against by one hour to 39 hours, was further claims for aborter claimed by union laaders in the industry to be an advance.

word was party to the deal. by the main engineering section of the AUEW.

Settlement being described by the unions as a "victory" are a clear indication of some rather than as a "failure," or, at best, a "hollow victory."

It objects to the Confederation.

which we were on strike at considerable loss to our income and £100. thus hardship to our families." Another motion calls for a apply for calculating overtime ballot of all CSEU unions and premium payments but are before industrial action is topped up by local deals.

Some district committees of the 59,000-strong foundry section are sharply critical of the negotiated at plant level.

exerted next month at the that the struggle be resumed in Another motion urves the

section's executive to press for The agreement ended last renegotation of the agreement mentation of the 35-hour week." The agreement, made last

October, is supposed to protect hours until 1982. Motions before the Blackpool But motions before the conference will also set up pre-

foundry section conference are liminary pay targets. The main bighly critical of it. The foundry claim will be set by the CSEU, section was one of tha unions largely on the basis of the claim

It objects to the Confederation cent national minimum rate of Shipbuilding and Engineering increase. This calls for the Unions, failure to achieve many skilled workers' minimum rate items of the original claim "for of £73 per week-set under the October deal-to be raised to

Minimum rates in the industry and premium payments but are topped up by local deals. Another pay motion calls for the ending of the minimum rate

traffic control members on taking disruptive industrial

lectors, who wish to take part in the action, and will examine reports of local negotiations with individual councils on the

Local authority employers are due to meet today to consider

industrial action and their own response to the unions' rejection of their 6-12 per cent

comparability offer.

Second union joins councils pay row

BY OUR LABOUR STAFF

Public Employees will instruct committee meets this afternoon its white-collar local authority to consider balloting its airmembers to join industrial traffic control members action by National and Total tion members over a pay comparability offer.

NUPE's executive decided on packags holiday flights.

Saturday to follow NALGO's lead. It is instructing members to ban are sent to hand the sent t

to ban overtime, to work to rule in the union, including rent-col-and to withdraw co-operation in lectors, who wish to take part councils. This will support NALGO's efforts to stop all work on rate demands and on

NUPE claims about 25,000 members, mainly in supervisory grades, among the administrative, professional, technical and clerical staff involved.

Mr. Ron Keating, assistant general secretary, said yester comparibility offer. The unions day that NUPE members would are claiming 10-22 per cent. join NALCO members in taking the same industrial action and withdrawing co-operation.
Some NUPE members re-

sponded swiftly to the executive's instruction. Computer staff employed by Mid-Glamorgan county council yesterday halted computer work on rate demands. This authority is the largest in Wales and among its staff in the appropriate grades NUPE bas a mem-

The employers' side has been of . individual responses authorities to rejection of the offer. The responses will be considered today at the employers' meeting, to determine whether a fresh offer should be made.

The employers are considerthe Local Authorities' Conditions of Service Advisory Board bership about equal to NALGO's. to consider the dispute,

A CLAIM for salary increases

of 27.5 per cent has been sub-mitted by the National Union of Bank Employees for staff in the

The claim, due for settlement

at the heginning of next month,

also includes a demand for a

holiday bonus worth 1-26th of annual salary and a mechanism for protecting the

value of the settlement against

Mr. David Paterson, the

union's deputy general secre-tary said the union does not

ant the new agreement to run

for a fixed term. If the banks insist the union will want a

thresbold or indexation clause.

The claim is based on bank profits, the level of inflation

and past cooperation from staff

over naw equipment. Mr. Paterson said.

23,000 ataff. The English

clearers made a 17 per cent

claims ranging from 20 per cent to more than 30 per cent.

offer last week in response to

The claim affects about

Scottisb clearers.

inflation.

Scots bank staff claim 27.5% rise By Nick Gamett, Labour Staff

NEGOTIATORS for the two largest Civil Service unions will begin talks today on pay offers heing put to them by the Civil Service Department following the Government's announce-ment of a cash limit and cut in manpower which togather pro-

Friday after the cash limit was announced, but details of those drawn up for the Civil and Public Services' Association, the main cierical union, and the Society of Civil and Public Servants, representing admini strative and executive grades will be revealed today.

ably next week.

Research Unit.

from staging could be achieved. Union leaders will meet Power stewards back 18% deal

By Our Labour Staff

POWER WORKERS' shop stewards voted at the weekend to accept a pay offer of 17-19 per cent which has already been agreed to by official leaders of the 96,000 electricity supply manual workers. The National Joint Shop

officially recognised by either employers or unions, said it still intended to pursue outstanding items of the original claim such as a shorter week more holidays, voluntary early retirement and official recognition of shop stewards, to report back to a stewards conference later this year.

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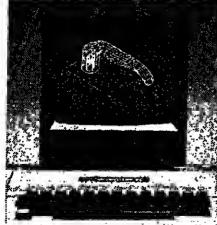
are good, the benefits manifold -- and, in

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SOMETIMES MDs FIND IT DIFFICULT TO LOOK AHEAD.

When you're the managing director of a suc- the NatWest Bank Group at your disposal. cessful company it's very tempting to just let things And these resources are considerable, rang-drift along in the same old way. After all, the ing from leasing, factoring, salary payments and company is doing very nicely, isn't it?

your head in the sand won't make the missed business opportunities disappear.

Perhaps, therefore, a re-evaluation of your

company might be worthwhile.

might help. He can provide you with an unbiased available. and slightly wider view of your whole situation. If,

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If you're interested just get in touch with your between you, you decide that there may be some local NatWest manager. You never know, with his room for improvement in your business, he can put all the resources of NatWest lities that you've never seen before.

THE BANK THAT MEANS BUSINESS.

Building and Civil Engineering



An film contract to build the first phase of a new district general hospital at Maidstone, Kent, has been awarded to John Howlem by the South East Regional Health Anthority. The development will be two miles west of the town centre

Water for a desert city

scheme for the town of Hail in

The scheme, which will take to supplement the town's exist- pumped first to a ground level about two years to complete, is ing water supply with up to being carried out for the 20,000 cubic metres of water per Ministry of Agriculture and day initially with the capability Water, Riyadh and was designed of future extensions of up to service reservoir in Hail.

James Street and Long Acre in

* London's Covent Carden.

Premium Garden site

the new £11.3m water supply national). The main contractor is the Sangyong Construction from new boreholes to be sunk Company of South Korea.

from new boreholes to be sunk at Hamimah, some 45 kilometres Company of South Korea.

Refinery WORK IS in band on a 26,580 are being retained and the

sq ft net ahop, office and flat whole of one section refurdevelopment at the corner of bished. These buildings form part of an bistorically important terrace. CONSTRUCTION ENCINEERS William Press and Son bave been awarded combined con-The scheme will provide a It is being carried out on six-storey office development of Kellogg for pipe and vessel erection associated with the bebalf of Interland Estates, a 13,985 sq ft together with 11,225 sq ft net of shop/restaurant resin upgrading project at the

subsidiary of Heron Corporaaccommodation at basement At e cost of £11m, facades and ground-floor levels. Four tasks for Tilbury CONTRACTS TOTALLING over Depertment of the Environ-

tion, the largest being the Lindsey Coast Scheme at Skeg-ness, Phase II, worth over To take around one year to complete, the project involves

construction of and modifications to pumping stations, with more than two miles of rising main to be constructed or

Extensions to Harwich telephone exchange, ordered by the

£1.29m have recently been ment, Property Services Agency, ewarded to Tilbury Construction will be put in band shortly, with a contract value of £270,000 and a period of 18 months.

Blue Circle Industries bas awarded the construction of a £187,000 motor repair depot, with access roeds, et the Harbury cement works, near Flare Stock area. Leamington Spa in Warwick- But the most s

shire. A new access road with drainege works to the Maltings in Salisbury is valued at over

WORK HAS started on aite on by Sir Frederick Snow (Inter- 40,000 cubic metres per day.
the new £11.3m water supply national). The main contract The water will be obtained The purpose of the scheme is north of Hail and will be tank and then via a 600 mm

diameter ductile iron pipeline to

units where residual oil is being upgraded. The biggest single

section of the work is the second

contract which provides for the

febrication and erection of further pipework, vessel and

steelwork in the offsite new

But the most spectacular job

is reserved for the third con-

tract which calls for the

erection of the 350 ft high, guy

supported, flare stack in May

to carry out a major re-construction at the Legion's headquarters building, 48/49 Pall Mall, London. The work involves the demolition of the rear of the building which is to be re-built and extended to provide additional

Legion has

ROYAL British Legion has

appointed Bovis Construction

HO plans

accommodation. Thus all London-based Legion organisa-Thus all tions will finally be boused in the same building. An essential aspect of the scheme is the retention of the existing Pall Mall facade,

behind which 39,000 sq ft (gross) of officea are to be created, together with a council chamber at basement level, Mobil Oil Refinery in Coryton, Reconstruction, now in pro-The work has been divided

gress, will take some 74 weeks to complete and the cost figure into three separate contracts. The first calls for the erection is thought to be around £11m. of fabricated pipe work and instellation of pumps and filters for the effluent area from the At Pall Mall, Bovis face several severe problems, including access limited to the rear of the site and the fact that the new Jubilee Line tunnel passes directly under the Legion's

> Architect is Stanford Eatwell and Associates of Stansted Mountfitchet, Essex; structural engineers, Mitchell McFarlane and Partners: quantity surveyor Gordon Harris and Barton and mechanical engineering con-sultants, Ellis Mechanical sultants.

Sports in Scotland

AT BLANTYRE, Cubitts (Scot-land) is to build a £2.17m sports designed by Hamilton DC direc-centre for Hamilton District tor of architecture, E. D. W.

Accommodation at the centre will include a 25-metre pool and training pool, a sports hall and ancillary hall, two squash courts, changing areas, sauna suite and aolarium, cafeteria and bar lounge.

Designed with a steel frame and feinforced concrete floors, the elevations of the new building will be largely of brick. The contract includes provision of the car park and landscaping.

Duncan, with Thorburn and Partners as structural consultants and Wallace, Whittle and Partners as consultant engineers for mechanical and electrical

On the Scottish coast at Saltcoats, the company (member of the Tarmac Group) will build an amusement centre with office accommodation above for B. Kemp Consolidated Leisure. Architect for the £225,000 project is John H. Brackston Asso-

Comfort at the Opera

MANAGEMENT contract awards for e building to contain sist of an opera rehearsal rehearsal and changing facili- studio; a chorus room with ties at the rear of the Royal

This project forms the first phase of a major redevelopment of the whole area around the showers—and Opera Houae. When complete offices. late next year, the new structure will provide practice and the Royal Ballet Company. Opera House.

tiered seating for 120 people, Opera House, Covent Garden, two ballet studios, new stage London, have gone to John door and telephone system, 12 Mowlem and Co., and work is dressing rooms for opera principals, dressing rooms for 150 singers and others-new wardrobes, changing rooms and administrative

The building has been designed by the GMW Partnerstudios and dressing accommo-dation for both the Royal Opera Scott Wilson Kirkpatrick and Scott Wilson Kirkpatrick and Partners and the quantity sur-

TRANSURB Consult, Brussels, the Brussels Inter-borough Algerian Railways for the complete engineering design of the

In partnership, Transurb Consult is also carrying out a reorganisation survey Algerian Railways accountancy and finance systems.

Transurb Consult is the Beigian engineering company which groups operating companies — Belgian Railways and

veyors are Gardiner and Theo-bald.

Belgian ideas for Algeria

The new railway line will be approximately 60 km long and will connect up with the exist-Algiers-Constantine line. This contract is in addition to three other contracts in band by Transurb Consult concerning the complete design of another railway link to the new industrial site at Jijel, study of the reorganisation of the rolling stock maintenance sbops, and study of the reorganisation of the management computer sys-

and the construction will largely consist of load bearing brick

has obtained a contract from Transport Company - and the principal Belgian design and Engineering offices.

rail service for the future in-dustrial zone of M'Sila, **McAlpine**

> homes in London ANOTHER STAGE in the upgrading of Tolmers Square, London has been reached with the award to Sir Robert McAlpine and Sons of a £2.6m contract by the London Borough

of Camden, Sixty-nine dwellings, six shop units and a community centre are to be erected on a 5,000 square metre site. The beights of the atructures will vary from 11 metres to 23 metres

and block with timber and reinforced concrete floors. Work starts at nace with completion for late 198L Architect is Renson Howard Wood Levin Partnership and

Arup and Partners.

the consulting engineer Ove

Mears wins Jersey job

yacht marina in St. Helier is to be carried out by Mears Contractors at a cost of £1.4m

for the States of Jersey.

A low wall is to be built around the toe of the existing masonry wall of the upper harbour on the north, east and west sides. In some areas the wall will be of mass concrete placed on rock, but where the rock is low, sheet piles will be

On the south side of the upper harbour a blockwork wall by Wates structed while in the south wall AGAINST THE trend Wates of the yacht marina there is to be a concrete weir with two steel gates.

Mears will also be deepening the harbour by removing 60,000 cubic metres of material and in addition will position timber columns and mooring piles for the attachment of floating booms and pontoons: A sub-contractor will supply floating booms and pontoons, walkways, rampa, devices and services.

Benghazi contract

ELECTRICAL and mechanical services for the new Faculty of Science complex at the University of Gariunis, Benghazi, are to be designed by G. A. Bnckle • Fitch has a contract to and Partners, London consult redesign 25,000 sq ft of a

ing engineers.

They will also be responsible pound contracts, which they will

supervise. Architects for the complex. comprising chemistry, biology, zoology, physics; mathemetics and other buildings, are James Cubbitt and Partners, also of London.

Buckle bas been designing lectrical and mechanical electrical and mechanical services for earlier phases of the university's development

Chemicals

DESIGN, construction and complete project management of a self-contained formaldebyde plant with a production capacity of 30,000 tonnes per year is to be carried out by West's Pro-chem of Darlington. The plant is for the Chemical Supply Com-pany at its Haverhill factory in Suffolk and represents capital investment approaching

Construction starts month and completion is for

Engineering contractors to the oil,eas,chemical, process and power generation industries.

Renovations

Wilham Prest Group, Tel.01-353 6544

Special Works has won £21m worth of orders...

At Edith Grove, Chelses, S. flats are to be modernised for the Guinness Trust under a £1700 blocks will have new services throughout. Windows overlooking heavily trafficked roads will be double glazed. Flats will be insulated to reduce heat loss and further sayings are to be achieved by recovering roofs in low density concrete with a high thermal resistance.

Architect is Green, Lloyd and Modernisation of Wandsworth ,

police station will cost £499,000. Work will be completed within 10 months.

IN BRIEF

redesign 25,000 sq ft of a ahopping area at Shannon Airport for Aer Rianta as part for preparation of tender docu- of the redevelopment of the ments, leading to multi-million dutyfree shopping ares at

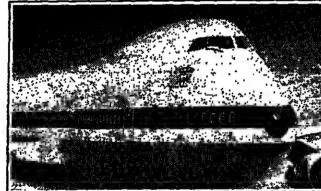
Shannon A major order for Gränges Aluminium profiled cladding, worth over £100,000, has been placed with RZ Aluminium Fabrications of Hull, for the cladding of the six new buildings currently under construction which will together make np the assembly plant for the new De Lorean luxury sports car to be built in Belfast. More than 12,000m square metres of "Monoclad" with Granges TRP 40-100 grey Metallack bonded to 30 mm polyisocyanurate insulatina will bave been used by the time the job is completed.

· Equipment for the tinuous production of GRP translucent sheeting at six metres a minute has been sold by Laminated Profiles Development to Venezuela. The contract is with Deco-Glass Indus-trial Y Comercial CA. Venezuela, and is worth over £100,000. It includes the supply of process technology, plant design erection supervision and commissioning of a complete production unit at a site about 50 miles from Caracas.

aler i

in ner

Hypo-Bank royal service means speed instead of red tape in international financing.



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As PSC Equipment Ltd, we developed pre-stressed concrete and its application from the beginning. The many projects in which we have been involved, from off-share

structures auch as the Ninian Centra Pletform to the flatjacks that held up York Minster during its restoration, represent not only ariginal design and application but immense diversity. We've probably left more engineering landmarks round the world than anyone since the Narmans! Now, we look forward to putting up many more during the eighties.

PSC Freyssinet will be officially inaugurated at the Commonwealth Institute on March 19th.



PSC Freyssinet, The Ridgeway, Iver, Bucks SL0 9JE. Tel. Iver 652844 (STD 0753). Cables Freyssi Iver. Telex 848474



The National Construction Division of the WOOD HALL Building Group

كعدامن المحكول

Fiscal relief in business game

novations Wates

IN BRIEF

· A SHINING example to the Chancellor of the Exchequer has just been set by the edministrators of this year's UK national manegement championship, which began in January with an entry of 808 teams. The administrators, who play the role nf Government in the computerbased contest, have rewarded the 202 teams which have won through to the second round

with a 20 per cent cut in taxes. This fiscal generosity, how-ever, bas been balanced by a worsening of the general economic conditions facing the surviving "paper" companies in their struggle for one of the 64 places in the third round, which starts in mid-April. Two further rounds will then reduce the entry to the four teams who will compete in London on July 23-24 for prices of £2,000, £1,000, £750, and £500 of £2,000, £1,000,

Players still in with a chance include the 1979 champion, Neil Tomkin of Rank Xerox. even though his company's initial entry of six teams has already been halved. Of companies which suhmitted a massentry, ICI bas the best record with ten teams still surviving out of the 18 who came to the starting line. But RHM Foods three initial entries are all aull

The 606 teams which were knocked out in the opening of those "what will it be like round can retain a chance of financial reward hy entering the subsidiary "Plate" competition organised by the National Management Game's sponsors—the Financial Times, ICL, and the Institute of Chartered Accountants in England and Wales, in conjunction with the CBI and

the Institute of Directors. The Plate, which will also be decided in July, carries prizes of £750, £500, and £250 for the three teams who direct their paper "consumer durable ousinesses into the final. Entry lists for the subsidiary contest will be kept open by the edministrator, Geoff Trewinnard (NMG Victorie House, Sonthampton Row, Lordon WC1B 4FJ-Tel. 01-242 7806) until tomorrow,

The missing link in the engineer's armoury

Brian Houlden and Terry Hill argue that the Finniston Report overlooks the need for management acumen

national corporation moved from the position of financial controller of its substantial originally trained engineer.

His job change, and his years. earliar career path, exemplifies But the sort of contribution by engineers to industry which the Finniston Report wishes to promote. It illustrates one form of the flexibility of engineers across the "engineering dimen-

The executive had originally graduated as an engineer, but his course included some management topics. He followed this with three years as an sngineering officer in the defence forces, attended a oneyear business school course in North America, and for three years worked with a leading international consultancy specialising in company structure and stretegy issues. He then joined the finance function of this multinational. Over the next few years his performance was not a qualified accountant, has led to a loss of markets, low be was promoted, at a relatively productivity, falling profit young age, to the post of margins and shortages of young age, to the post of financial controller.

His example illustrates some general points. Most senior failings are clearly demonexecutives, whetever their prime strated in the television, motorfunction, heve to bave as much, if not more, understanding of business and management as of

PARTS of this book, "Britain through the 1980s," are rather like an extended version of one warld war to e rising hirth rate; James Morrell's odds are put reader is invited to estimate his own odds and to construct his matter. own scenarios of possible

Life, as one of Damon Runyon's characters once remarked, is six to five against, and it is great fun trying to assess whether there is more or less than a 40 per cent chance of the "emphasis in political management shifting from economic to social factors" whatever that might mean - or

their specialism. Engineers, in . The early part of the report tence in engineering itself. He In parallel with his knowledge order to make a full corporate focuses on what it calls the needs to he eble to relate his of engineering he has to be able In this case, the executive echieved this mix and earned Enropean ectivities to that of his standing in the company, hy technical director. He was e combination of formal education and experience hlended together over a period of several

> But it is not only engineers in senior management who need an understanding of business

Yet the recommendations of report largely overlooks the the Finniston Report give scant management content of what it attention to these management describes as the "engineering aspects of the education of dimension."

engineers.

The report explains clearly the link between the success of the manufacturing aector end our future standard of living. years much of the UK manufac-turing sector has been losing out to foreign competition because It has failed to make technological advances in its products and production processes. This resources for investment in new products and equipment. These

contribution, are no exception. broader mission of the "en- technical knowledge to an to develop quickly a practical forward the view that the widening of the engineering contribution is an important prerequisite ing industry. Certainly engineering must bave a bigger impact on our manufacturing industry if these shortcomings are to be overcome, but will implementa-tion of the proposals in the and some management animy.

Both thuse in mid-career and raw graduates in junior posts in the impact of engineering on will operate less effectively if industry? We think that they will not, hecause in its recommendations on education the

Too late

are many examples of British companies falling behind in technical advance, there are also many cases of excessive focus on tech-nological sophistication. This invariably leads to products arriving on the market too late, praducts which are ao costly to produce that they yield inadequate profit margins, and pro-ducts which are too prone to hreakdowns and difficult to maintain.

A successful engineer in cycle and machine tool in-cycle and machine tool in-dustries as well as in many therefore needs to bave much as much about management as more than a technical compe- engineering.

gineering dimension." It puts understanding of the customer's competence in the non-technical needs and be able to estimate aspects of the joh. The producthe total cost to the customer, tion manager controls the bulk He also has to have some under- of the fixed assets, current for improvement in manufacture standing of how a product assets, direct costs and people would be manufactured in employed. would be manufactured in employed. It is therefore practice. Thus, be requires not essential that he understands only a thorough training and experience in engineering, but does the technology of the proalso an understanding of certain duct and process. areas of business (e.g. mannfacturing management, marketing and accounting).

To achieve this, these "business" aspects need to be introduced early in his training; they need to be taught by management teachers who have experience of their subjects related to such engineering situations, and they must occupy a significant part of the total

It may be thet some of the enhanced courses at ten institutions which the report mentions do match the particular needs of engineers going into research functions in industry?

Industry also particularly needs better people in produc-tion. To help achieve this, it requires graduate engineers of quality who wish to spend much their careers in line production management. For such work an engineer has to know

these areas es thoroughly as he

In order to contribute he needs to be able to discuss issues intelligently with the support functions which exist in the company. He needs to be abls to dehate the alternatives and then play a decisive role in implementing and developing procedures systems in the areas he controls. He needs to be able to do this with the same level of competence as be exercises in the tecbulcal arena.

Thus be needs to be able quickly to develop a practical competence in production scheduling and control, in development and design. But industrial relations, particularly what about the different types of engineers oeeded for other industrial eogineering. He also needs an ability to develop proneeds an ability to develop proposals for new production pro-resses and additional capacity, and hence to be able to and hence to be able to interpret fachnical knowledge for accountants (which means being able to talk in their language!). A further require- sense is largely scientific, in ment is a good understanding that problems can be described of quality control.

fairly precisely and quantifica-A new BSc programme in tion is relatively easy. On the of Warwick.

Mannfactur ng Studies at North other hand business and manage volume (ar manufacturers. programme is devoted to technical cagineering subjects.

Similarly, paths can be traced for greduate engineers wishing pursue the early part of their careers in marketing, personnel, purchasing and finance — their technical engineering training needs to he metched management subjects specially chosen to relate to their career

Dimension

management

The early part of the Finniston Report does focus on this broader mission, but it does not then match these "needs" with its recommenda-tions. If the latter are implemented, the quality of eering is likely to improve. As a result we will get better engineers in the technical sense. But this is not enough to secure the required impact of enginering across the whole engineering dimension." eering

Engineering in the technical

East London Polytechnic was ment are concerned as much designed in close collaboration with art es science. Problems with staff of the UK operations are dynamic end difficult to of one of the world's leading describe or quantify; they embrace human bebaviour and Slightly over half of the total financial resources, as well as technology. The mind of the eogineer must be brought to understand and cope with these intangihles much earlier than et present. Otherwisc his thinking becomes set in its ways. and career opportunities across become closed to many.

> Much serious thought needs to be given both by industry and those in schools of engineering and schools of business. about bow to develop integrated flexible programmes. Such courses would have to offer enough optional subjects to allow different students wish lng in pursue engineering careers, to choose the eppropriate balance of engineering and management subjects.

This is a challenge that the Finniston Report fails adequately to expose. If it is not answered correctly, the hetter future for the people of the will not be achieved.

Brian Houlden is the Institute of Directors' Professor of Busi-ness Studies, and Terry Hill, the Senior Lecturer in Production Operations Monogement, in the School of Industrial and Business Studies at the University

BY PETER RIDDELL

Guessing the odds for the future

reises the important question of

or amounts to a "strategic developments but also political planning guide for husinesses factors, such as legislation and in the 1980s" is e different the stability of particular

ties the book is not entirely sections of the new hook are without merit or interest. It those discussing the new hook are for various industrial sectors. what type of guide to possible Reflecting on his own back-future developments is likely to ground as an economic forebe useful to the corporate plan-ner or executive, and which is industry, Mr. Morrell identifies not. Strategic planning is enjoy- a number of new industries for ing sometring of a vogue at the 1980s, meny of which will present, as the recent erticle be concerned with the develop-on this pege on Shell pointed ment of information systems on WC1B 453—761, whatever that hight mean—or on the per cent chance of "war out. There is obviously a leginate role for a discussion of timate role for a discussion of and new sources of energy and timate role for a discussion of raw material. There is, however, an obvious danger in trying to pick "winners" as technical time on his lines and new sources of energy and timate role for a discussion of raw material. There is, however, an obvious danger in trying to pick "winners" as technical time of the property of the prop

quite as sweeping as the enthnsiasts predict.

Such strategic planning exercises can belp in provoking thought about the impect both of technological change and of political and economic uncertainty. But this book goes into an area where there ls much less scope for useful It is full of assertions which

either rest on tenuous foundations or have no meaning as statements. For example, Mr. Morrell concludes that union power has reached its peak and the social forces at work in valus whetsoever to any just a vague mixture of the Britain today point towards the manager apart from the trite latest fashionable trends.

reduction in size of work units and the steady erosion of the influence of unions." Or not as the case may be.

It is not clear what any manager is supposed to make of the suggestion that there will be further progress towards female equality. In itself this means nothing. The vaculty of such comments is only matched hy the estimate that there is only a 2 per cent chance of a world war but a 50 per cent chance of a non-nucleer war on the scale of Korea or Vietnam

point-obvious to any reader of

nationals already bave their corporate and strategic planning departments, and, further down the scale, il is bard to see what medium-sized companies could find useful in the more speculative social and political parts of the book. Should the senior executives of a marshmallow manufacturer really waste their time worrying about whether they are properly organised to meet the opportunity (or threat) posed hy, for example, the suggestion that "the UK will move in a conservative direc-tion?" These executives should certainly be concerned with the impact of external influences somewhere in the world. Such hut they should stick to ones apeculation is of no practical which are identifiable and not

There is a proper role fo any newspaper—that there is the discussion of possible social considerable political uncer- and economic developments though it should not be termed It is also unclear at whom forecasting. Mr. Morrell should the book is aimed. Large multi-bave confined himself to those areas of the economy and the industrial structure which be knows well and about which he writes plausibly, if somewhat ponderously, in this book,

Yet there is still something slightly sad about the growth of this type of strategy planning. The desire for forward projec-tions and "scenarios" is in part a resection of the decline of the entrepreneurial spirit and an associated desire to suppor any decision with the maximum amount of analysis, however

James Morrell, Gower, £65.

CONSTRUCTION

Quieter way to break new ground

WORKMEN AND public alike pneumatic tools. The usual have not been enamoured with heavy forgings have been the offensive noise and discomer replaced with simple steel the offensive noise and discompositions of the suffer strength of th ture, promising to be easier on

called the Zitec 20, it is the first product to emerge from a radical new approach to construction tool design by CompAir Construction and Mining, Tools Division, Camborne, Cornwall (0209 712750). The company's letest concept

-which they call Zitecnology-aims to take advantage of the achieve designs that lighten the steel forging which forms the health and safety hurden on main body, but with the new machines which can be used for long periods without causes to an integral part of the heavy main body, but with the new machines which can be used for replaced by a steel tube heavy long periods without causes.

unnecessary fatigue.

According to filmed interviews conducted on building sites by the company, men who bave ing of the hreaker which is also used conventional road hreakers made of the same tough for most of their lives in the material. construction industry report that the Zitec 20's performance plastic results in the suppres-is unrivalled. plastic results in the suppres-sion of vibration and deadening

an ordinary deafening, bone enebled a long expansi passage rattling breaker until it is to he incorporated between the switched on . . . then the cylinder sleeve and outer case-differences are manifested in cutting down noise from explooperator comfort and the sive discharge of exhausted air, amount of time ba can spend The result is low noise level using this tool against the -84 dBA at seven metres and exhausting exercise necessary 92 dBA at one metre. with tools which do not boast

To begin with, it weighs only 20 kg vet will tackle any joh previously requiring larger

Contract The weekly with the business

Anglo Saxon ears. and promises to Called the Zitec 20, it is the dards in industry. and promises to set new stan-Trim it may be, but not at the expense of toughness. The

plastics chossn for this model allow it to stand up to the roughest site conditions and are self-healing if accidentally

Traditionally the guts of the breaker, the cylinder, has been an integral part of the heavy machine. Cylinder is bonded into a polyurethane sleeve which slots into the outer cas-

Embedding the cylinder in This looks and even feels like of noise. The design bas also

Maintenance is simpler bethe Compair product's advan-tages: cause there are only 28 com-ponents in the machine which can be easily serviced on site (one spenner only is used for dismantling) and even the piston can be changed in well neder balf an bour.

DEBORAH PICKERING

SAFETY & SECURITY **Explosion-proof drums**

alloy mesh, which protects the contents from many explosive bazards including impact, ex- coat being an easily identifiable ternal beat, flashback, auto and yellow. electrostatic ignition and drum

electrostatic ignition and drum

penetration by anything from a

hot splinter to an incendiary

be supplied with approved labels

four stoved coatings, the final

Villains seen at night circuit television that works in the trouble and make a video ings of what it sees only when trouble is afoot has been developed by RSS Group, Roundhay Road Industrial Estate, Grant Avenue, Leeds 7 (0532 468158).

An active infra-red technique is used in which protected areas are bathed in infra-red radiation, not visible to the eye.

Often only one camera is

The company says that in If anything suspicious is seen, following morning.

AN ANTI-INTRUDER closed the officer can also zoom in on the dark and can make record. recording. The system can also work unattended at night if In addition, satellite cameras can he connected and the use of motion detection in the signal processing will turn the recorder on only if an intruder

necessary since it can be one trial installation, intruders panned and tilted from the were recorded comprehensively security officer's control console. for four hours and arrested the one trial installation, intruders

Meter for danger zones

Doulton Group, of an intrinsically safe digital multimeter.

pheres in mines and petro- prohibited. chemical plants. Battery powered and port- Derby DE2 4AB (0332 41671).

IMPORTANT where engineers able, the instrument weighs are required to work in flamonly 2 kilos. Its resolution is to mable atmospheres is the 1 milliouth or 1 microamp on mable atmospheres is the development by John Davis and development Son (Derby), memher of the provides ac and resistance

ranges, plus diode check and indication of over-raoge inputs. The unit will permit conven-This is a conventional unit tional installation and maintenthat can be used with confidence ance procedures in areas where in potentially explosive atmos- they hitherto would have been John David, Alfreton Road,

Keeps the heat in the buildings

Basis of control in a system

developed by Horiba in Japan is the resulting huild-up of carbon dioxide, measured on the company's latest carbon dioxide monitor. Large savings are claimed in central heating

The APBA 200 monitor is set manual frimmine.

AN OBVIOUS way of preventing the escape of heat from a
gas, typically 1,000 parts per
alone instrument, the unit will
million and the warm air within
the hullding is then recircular. the hullding is then re-circu-lated until this level is reached.

The monitor will then automatically trim the ventilation meter on the front panel. An of 0.2 to 0.4mm, giving minimal control damper to maintain the alarm light will come on when

DRUMS designed to protect petroleum spirits, solvents and other low flash-point liquids from explosion, have heen designed by Fire-Reliant, of Southport, UK.

In 25, 50 and 210-litre sizes, they are each filled with Explosion, an expanded aluminium allow mesh, which protects the spirits, solvents and the utilisation of suitable Post of a stire hy advertising its computers quite heavily on television, wang (UK) has an expanded aluminium allow mesh, which protects the spirits, solvents and the utilisation of suitable Post of a stire hy advertising its computers quite heavily on television, wang (UK) has an expanded aluminium industrial drums.

HAVING CAUSED something office business computing and the utilisation of suitable Post of a stire hy advertising its computers quite heavily on television, wang (UK) has an expanded aluminium industrial drums.

HAVING CAUSED something office business computing and the utilisation of suitable Post of a stire hy advertising its computers quite heavily on television, wang (UK) has an expanded aluminium industrial drums.

London hotel where more than industrial drums.

2,000 people attended a product presentation in several shifts. adustrial drums. 2,000 people attended a product The surface finish involves presentation in several shifts

No brand new bardware was on show at the London meeting and a good deal of the emphasis was on integrated systems that could bring together business data processing, word processing and communications, welding all of a company's functions together with workstations and

For some time Wang has offered its integrated information systems in which at one sparated sites requires only

—alreedy gaining a bold to the U.S.—in which not only does linking of such integrated processing between offices in the same building become possible, but between geographically separated sites as well. As well reasible, cutting costs.

Using channeling through a node. WISE (Wang Office Information System) hrings separate integrated office clusters togelber to form a whole. Then, separate staffs can easily perform a number of inter-system functions such as disc management, multiple document access and transfer of volume archiving from their own docations. In eddition, any of a large number of workstations can always be made available

for a particular heavy volume

tween the sites.
Information that is created on

a Wang workstation is automatically routed to its destinaas data interchange, sharing of tion in what might be cuite a peripheral equipment is also complicated network, the opertor using a menu and mailing directory. The directory is in essence an electronic address book which lists the names uf essence an electronic address book which lists the names uf those persona in an organisation for screen based choice.

Once the distribution is selected, Mailway routes material without operator intervention. Dialling is obviated by means of an auto-call facility—
means of an auto-call facility—
mely system can now get readiogs from any telephone using
an additional acoustically
coupled terminal supplied by means of an auto-call facilityonly one or two buttons need be pressed.

literature puts it: "It's as easy as licking a stamp." Richmond Road, Richmond, Surrey TW9 4LU (01 878 7821).

Wang (UK) is at 211 Lower GEOFFREY CHARLISH

the company. The engineer — be might be at bome for example — only has to dial the phone number of the

> portable telemetry receiver into Battery operated, the tele-metry unit can obtain up to nine separate parameters from the outstation. These are displayed digitally together with confirma.

4PE (0344 51915).

VICKERS Management Services, which recently started offering software services to companies outside the parent group, has completed capture of some 17.000 paint weigh mixing formulations on microfiche for

The fiche will be used by the Bargar paint outlets in conjunc-ייי היי mixing equipment special viewers developed

In its present paper form the are produced annually for world

Vickers' microfiche alternative provides immense savings in distribution costs alone because the entire contents of the A4

Ring: LEE GORING 01-643 8040 ext 4306

leads

control damper to maintain the level, minimising the cold air the pre-set level is reached.

Available in the UK from considerable reduction in wasted heat is achieved in comparison with conventional comparison with conventional considerable reduction in wasted the pre-set level is reached.

Available in the UK from suitation.

Suitable metals (not aluminimising the cold air the pre-set level is reached.

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Suitable metals (not aluminimising the cold air the pre-set level is reached.

However, the punching unit the pre-set level is reached.

However, the punching unit the pre-set level is reached.

More from 151 Chase Side.

Vickers Management Services.

Newcastle on Tyne (0632 (01367 2989).

IN THE OFFICE

Linking many important tasks

over two days.

Since the company started in 1951 with calculators it has always followed an end user approach and its most popular unit, the 2200 small business computer is now installed at an impressive 36,000 sites throughout the world. The company now claims to be number two

in the supply of such equipment.

METALWORKING

Big bang joins tubes to plates BECOMING generally accepted as an industrial technique is a form of explosive welding which can be used in the repair and to accelerate directly one component towards the other.

In tube to tube-plate welding, 0.005 in (0.125 mm), even when the "stand-off" is annular and thick-welled tubes are being

manufacture of beat exchangers. is typically balf the wall thick Developed and patented by IRD, ness of the tube. In certain the new technique, called designs of heet exchanger this does not require a taper to be IRDEX Welding, is the latest gap is a limiting factor in fixing move in IRD's work in this tubes into tube-plates since it plates. area.

With explosive welding techniques used until now it bas been necessary to provide an appreciable gap or "stand off"

between the two parts to be uses into tube-plates since it plates.

Analog matched on the tubes or tube-plates.

One example of the use of this method is in the re-tuhing of 12 high pressure feed water heaters for Castle Donington between the two parts to be

Cuts with laser and punches shapes TRUMPF Machine Tools, which or if a slightly more ragged quantity is high enough to material during this year, has introduced a unit which com-The advantage of the laser is

The machine uses a Photon ment cost!. Sources mixed gas laser from the U.S. with a Trumpf optical The method can also generate system, resulting in a con-sistently produced cutting width waste and environmental con-

expects to sell some 240 numerically controlled machines for the removal of metal from sheet formed aemi-automatically with

a cartridge which is directly shape forming, edge forming out special tooling and hy using adaptor, or automatically via and so on, with punching for regular shaped holes.

There are thus no tool replaces stored in a multi-station hines laser cutting for complete that any shape can be cut with inserted into the single tool programming, pre-loaded cartridges which are system comprises a catalogue stored in a multi-station and eight separate manuals; magazine. 20.000 copies of the cetalogues All the tools are clamped

small radli, narrow webs, ecute hydranlically into the rigid tool angles and large cut-onts that adaptor which is supported by exceed the maximum punching an extra long hydrostatic ram diameter of the punching bearing enabling standard section—or those that would punches to take off-centre loeds

specious. A recognition that the world is uncertain and that flexibility is required is worth more then a whole library full of "scenarios." Britain through the 1980s but Norgren **B38** Instrument





O INSTRUMENTS

Readings

DUTY ENGINEERS responsible for plant that is being monitored by Dynamic Logic's Tellel public switched network tele-

outstation required and then place the earpiece of the band-set on the new Micromaster

tioo of site identity.

Dynamic Logic is at Doncastle
Road, Bracknell, Berks RG12

SERVICES Paint mixes on fiche

Berger Vebicle Refinishes of Dreenham.

'ne use in flammable environmonis.

BY SAMUEL BRITTAN

that is a matter of years. Any- per cent per annum. thing else is gimmickry or Mr. Healey's experience was wishful thinking. If Conserva largely due to the inflow of tive constituency activists or funds from OPEC holders (who President Carter's campaign were less sophisticated than advisers find the prospect of they are today) and also to the waiting for the anti-inflationary 1974-76 UK recession. But just medicine to work intolerable, as a high PSBR could for a they will have to learn to tolerate it. Their only alter- short-term interest rates, a low native is to force on their PSBR may after a time coincide Governments inflationary with high interest rates. policies which will in the eod But if Mr. Healey expects too

mick. Let us suppose that in an attempt to hold hank hase or prime lending rate. or prime lending rate to say 17 per cent when the market is weak and noreliable. the Bank of England imposes advances ceilings and that they really work Privileged borrowers - customers that banks do not want to lose-will pay 17 per cent plus the ture of these rates. Short-term customary margin. If other rates are now historically very clients were prevented from high in relation to long-term borrowing altogether, they ones in the U.S., and this would be facing interest rates change in structure is spreading

institutions, finance companies many and Switzerland have reor plain money-lenders and pay cently reised thair official well up into the high 20s. The lending rates, victims would include just. The one simple lesson for

Geoffrey Howe, has so far ages naturally make one suscreditably resisted thesa gim-picious that the authorities are micks. But his own plan for still unwilling to pay the price turning the interest rate tide of a money supply policy. to non-inflationary levels.

is dwarfed by the state of the husiness cycle and international movements of funds. Mr. Denis

anywhere else. That is to reduce high as it is today; but money the rate of inflation; and even supply increased by only ten

Mr. Healey's experience was time be combined with low

take interest rates far above many good things to flow from present levels.

a high PSBR, Sir Geoffrey is in danger of expecting too much Selective credit controls to much advertised "surprise" much advertised "surprise" reduction in that

A floating exchange rate may insulate the general level of British interest rates from that in the U.S. But international influences still make themselves felt at least in the term structo other countries via the in In practice, many of them ternational financial markets, would go to non-hank credit France, Japan and even Ger-

those thrusting small firms over Governments remains the same; whom so many crocodile tears it is impossible to regulate both are shed. The average level of the supply of money and its (in-short-term rates will still be at terest rate) price. Recent Bank least 19 par cent. of England first-aid operations The British Chancellor, Sir to relieve money market short-

could turn out to he wishful Instead of building up too thinking in the short term, A many hopes on a PSBR fore-gradual reduction in the PSBR east short-term regulator, Sir as a percentage of the national Geoffrey Howe would do better product is essential if money to stress that he can no more supply growth is to he reduced control the immediate course of hank lending rates than be can But the relationship is a control the tides. If he wants medium-term one. Over short me to tell that to his constiperiods the effect of the PSBR tuency chairman, I should he very happy to take the next train to the uplands of East Surrey to do so.

Matters of confidence and public interest

Petroleum Company. In the earlier decision, last THERE IS only one sure way Healey points out that in his appeal by Lourho against a not always seel to reverse the sky high climb first two years of office the refusal by a High Court judge to the iron is how order the disclosure of docuof nominal interest rates PSBR was, as a proportion of order the disclosure of docu-whether in the UK, the U.S., or the national product, twice as ments in the possession of subsidiary companies of Shell and BP in Rhodesia, South Africa

> In the later decision, last week, the court rejected another appeal by Lonrho against a refusal by the same High Court judge to order the disclosure of full transcripts of evidence before, and written submissions by Shell and BP to, the inquiry which resulted in the Bingham

company were parties.

company against various oil companies, including Shell and BP, for compensation for nonuse of a pipeline built by Lonrho in 1965 to carry oil from Beira, in Mozamhique, to a refinery in

spiracy to injure Lourho and to hreak the sanctions order made by the Battle Government after UDI.

DEVOTEES of reticence and the aposition from Ian each company in a group of are not going to let you have enterprises operating in their it considered on balance the companies is a separate legal these documents," they could community be indentified with public interest would be better the national interest of that served by excluding such appeals two recent decisions in seem more like a peep into Appeal's two recent decisions in seem more like a peep into Lonrho and Another v. Shell ancient history than a topic of

Petroleum Company and British current concern. But time never stands still for

rights of one company cannot he exercised hy another com-

pany in that group. and a subsidiary company, even

Lord Denning, in his judgment,

said that whether a parent

company had power over the

depended upon the facts of each

In a one-man company, where

a man had 99 per cent of the

shares, his control and power

was so complete that the com-

documents of

subsidiaries

THE WEEK IN THE COURTS

BY JUSTINIAN :

ment with Lord Denning, said a document could be said to be in the "power" of a party to litiga-Under the ordinary rules of tion or arbitration for the purcompany law, a parent company poses of an order for disclosure broader, more controversial only if at the time and in the a 100 per cent subsidiary com- factual situation which obtained pany, are distinct legal entities, at the date of the order that Lords in 1977, D v. National The Coort of Appeal, how party had an existing indefeasever, adopted a more pragmatic this legal right enforceable by

trol it was at the time.

and "corporate entity" and

between one man companies and

multi-national conglomerates.

The Court of Appeal's later

in a case in the House of

Society for the Prevention of categories of public interest are not necessarily mean that it not closed and must alter from need not be disclosed. develop.

and more realistic-approach. legal proceedings to demand possession of that document forthwith from the person in whose sctual possession or conof immunity from an order for disclosure of a document, but should be withheld. that there were cases where con-In company affairs, as in other interest.

In the same case, Lord Edmund-Davies expounded the aspects of life, do not questions of power transcend questions of legal enforcesbility?

The general approach of the Court of Appeal in the Lonrho case has the merit of flexibility rules in greater detail. He said that a judge had no closure of information which and, in effect, of recognising the connections and differences between "enterprise entity" had passed hetween persons in a confidential relationship to

direct a party to that relation-

ship that be need not disclose that informaton.

The presence or absence of decision in the Lourho case, central government in the which is more closely concerned matter of disclosure was not conwith the Bingham report, raises clusive either way, though in practice it might affect the

cogency of the argument against disclosure. The sole touchstone was the public interest. The mere fact Cruelty to Children, the present that relevant information was Lord Chancellor said that the communicated in confidence did

time to time whether by restric- But where the subject matter tion or extension as social con- was clearly of public interest, ditions and social legislation the additional fact that the seal confidentiality would He also said that confiden- endanger that interest would in tiality was not a separate head most cases probably lead to the conclusion

Tha disclosure of all evidence fidentiality was itself a public relevant to the trial of an issue being at all times a matter of considerable public interest, the question to be determined was whether it was clearly demonstrated that in the particular discretion simply because what case the public interest would be was contemplated was the disbetter served by excluding evidence despite its relevance. If, on halance, the matter was left in doubt, disclosure should

On this basis, the Court of Appeal's decision may he upthis occasion the Lords reach the same conclusions as the Court of Appeal or whether, yet again, different views of the law or its application will be expressed at different levels of the process of appeal.

It remains a hasic rule of company law in England that they said to Shell and BP. "We in many levels of the same conclusions as the Court of Appeal or whether, yet again, different views of the dictated to by Shell or BP if it principle of managerial antonomy, to which the Bingham congruents in the the bringing conglomerates.

Moreover, it recognises the principle of managerial antonomy, to which the Bingham congruents in the delicity of a problem which confronts the legislation of Rhodesia and they said to Shell and BP. "We company law in England that they said to Shell and BP. "We controlled they the House of Lords.

It remains a hasic rule of company law in England that they said to Shell and BP. "We countries, namely, that they said to Shell and BP. "We countries, namely, that they said to Shell and BP. "We countries, namely, that they said to Shell and BP. "We countries insist that they said to Shell and BP. "We countries, namely, that they said to Shell and BP. "We countries, namely, that they said to Shell and BP. "We countries, namely, that they said to Shell and BP. "We countries, namely, that they said to Shell and BP. "We countries, namely, that they said to Shell and BP. "We countries, namely, that they said to Shell and BP. "We countries, namely, that they said to Shell and BP. "We countries of the Bint where a confidential neclestionship existed, and disciple of managerial anto-mony, to which the Bint where a confidential neclest consumers that information.

But they for the House of Lords.

It is important in these court had a discretion to upthe distinction to leave the matter sould discover would be in hreach of a suspicion that in the delition to receive a confidential and construction to their would discove would be in hreach of a suspicion that in these court had a discretion to up-

CINEMAS

40: Dudley Moore 120' CX1 Progs. 1.80 of Sun.). 3.05, 5.40, 8.15.
THE MACICIAN OF LUBLIN CX1.
095, 12.55 (not Son.). 2.50, 5.35, E.15.

LAST 2 DAYS: ESCAPE FROM
LCATRAZ (AA), Props 1.40, 4.00
20 B.40. ARES 1855ABA

320 1846 5: Woody Ares MANHATTAN (AAI Pross 12.50, 2.50 4.90, 6.50, 8.50, 4; Olivar Reed This BROOD (X), 1.05, S.50, 6.35, 8.20 CRUEL PASSION (X), 2.40 5.70 8.10, 5: THE LORD OF THE BINGS (A), Set. Pets, 2.00, 5.00, 6.00.

CURZON CARRON Street W1, 459 5777; Now Berll Mar, 58: DRAMA SE THE RZTH (AA), Crophsh abothes) SECTION Catherine Company and Camparie Catherine Firm at 1.45 (not 500.), 4.00, 5.20, 8.40.

DDEON. HAYMARKET. 830 2738-8771. THE RUNNER STUMBLES (A). Sep. perfs Wes 2.00. 5.00. 8.15.

ODEON LEICESTER SQ. (01-830 8117). Theatre closed today for Romil Film Protunance of KRAMER Vs. KRAMER FAYS Sen. Paris (2017) from tomorrow. March 18. doors open 1.15. 415 7.45 pm. Late show Fridays and Saturdhys thors now 11.15 Mp. All serbs may be

ODEDN. MARBLE ARCH. WZ. B1-723 2011-2. ONE FLEW DVER TNE CUCKOO'S NEST (X). Sep. props. Spn. Frl. 3.45, 7.40. Sat. 1.15 4.40. Bo. Evening Ferl. Bnd Weekends may be booked is Advance.

PRINCE CHARLES, Lele. Sq. 01-657 3181, Exclusing Limited Enpagement REGE EDV. CX. 569, Perts Div tine Sua; 152.0, 5.45 S.S. 6.45 Lie Shw Nightly 11.20, Seats bookable. Le'd Bar.

STUDID 2, 1 & 4, Oxford Circus, 01-457
3300, Lic'd bar,
2 '10' (X), Progs, 12.30, 2.45, 5.25,
8.05, Late Show Sat, 11.00,
3; THE DEER NUMBER (X), 12.45, 4.05,
4; APOCALYPSE NOW CO. Sep. Perfs,
Daily 1.45, 4.50, 8.00, Late Show Sat,
11.10.

Valiant Charger set for repeat

WITH GROUND again sure to pared with the 12 st shouldered well last time out, failing by be extremly testing today, the to a two-length success over five lengths to give Sonny premium will be on stamina at Dusky May last year, has Somers 11 lb at Lingfield. Folkestone, whera the Gay Record Challenge Trophy is the feature on an otherwise undistinguished card.

A year ago, Valiant Charger heat all five opponents in this event, which commemorates the

RACING

BY DOMINIC WIGAN

Queen Mother's 100th winnar under National Hunt rules. He may well be a prominent figure The compact Light Brigade gelding, who has been ser to

If Vallant Charger is to win today he will have to be hack to somewhere near his best, for Coolishall and Alhury Lad. to

winer, Ten Up, in the Duke of Gloucester Memorial Trophy carry 11 st 6 lh this time comrecently, Albury Lad also did

relishes testing ground. FOLKESTONE 1.45-Jolly Green Giant

At Wolverhampton, where

Hareshaw Linn is expected to give 18-year-old Andrew

give 18-year-old Andrew Pownall a good ride in the "bumpers" race, Guilsway may

he worth considering in the

Willemhall Handicap Hurdle.

The lightly raced grey mare

2.45-Valiant Charger* 3.15-Brighton Marina 4.15-Haywire** WOLVERHAMPTON

2.00-Concorde Girl

2.30—Entebhe 3.00—Gnilsway*** 5.00-Hareshaw Linn

HTV Cymru/Wries—As HTV West/ HTV General Service except: 10,05-10,20 am About Wales. 12,00-12,10 pm Tre-tetieu. 1,20 Penawudau Newyddion Y Dydd. 1,25-1,30 Report Wales Haad-lines. 4,45-5,15 Ser. 6,00 Y Oydd. 6,30-7,00 Repart Wales. 8,30-9,00 Yr Wyth-ros.

SCOTTISH

1.20 pm News and Road and Weather,
2.00 Monday Matines: "The Storytolles." 3.45 Food, Wine and Friends.
5.15 Spring Song. 5.20 Crassrads.
5.00 Scotland Tarlay. 6.45 Company 11.15 Late Call. 11.20 Have Gula Will

SOUTHERN 1.20 pm Southern News. 2.30 "Then Come Bronson" 5.15 Oick Troty Certoon. 5.20 Crossroade. 6.00 Oey by Oay. 11.15 Sputhern News Extra. 11.20 Barney Miller. 11.50 Inside Business. TYNE TEES

8,26 am The Good Word, followed-by North East News Neodlines. 1.20 pm North East News and Lookoroand. 2.30 Monday Madnes: "Rackets Gene," starring sennis Carson- and Honaid Sinden. 5.15 Mork and Mindy. 6.00 North East News Neodlines. 5.02 Crossroads. 6.25 Northem Life. 10.30 Northern Report. 11.00 North East News Heodlines. 11.05 Monday Movie; "The Oesth Trein." 12.30 am Epilogue.

1.20 pm Lunchtime. 2.00 Monday Matineo: "Blithe Spirit," aterring Constance Cummings. 3.45 Feed, Winter and Filands. 4.13 Ulater Naws Headlines. 5.15 Cartoon Time. S.20 Crossroads. 6.00 Good Evening Ulater. 10.29 Ulster Weather. 10.30 Oculos. 11.05 Royal Film Performance. 11.50 Bedtume.

WESTWARD. 1.20 pm Wastward Naws Massdines.
2.00 The Monday Matines: "The Mudlark," sterring frene Ounne and Alac
Guinnesa. 3.42 Gus Monaybun's Birthdays. 3.45 Food. Wine and Friands.
5.15 University Chollengs. 6.00 Westward Olary, 10.28 Wastward Lets
News. 1.15 Fantsay Island. 12.10 em
Faith for Life. 12.15 West Coantry
Wasther, Shopping Forecast.

YORKSHIRE

ENTERTAINMENT GUIDE

OPERA & BALLET

COLIEEUM. Credit carps 340 5258. Res-pryations 858 3161. Evgs. 7.30. Mat. 588 2.30. LONDON PESTIVAL SALLET, Ustil Tomor: Rosalings. 7on't: Rusnse. Kape. Wind & Thurs: Decak Varistions, Echoling of Trumpets. Etudes. Echoing of Trumpets, Etudes.

COVENT GARDEN. CC. S. 240 1088.
(Cardenchares cresit cards 658 6803).

THE ROYAL DPERA Ton't 5.50.
Lossengin (Teresa Zylis-Cara replaces
Toresa Kablab., Tho 6.30. Lohengrin
Lita Maria Flake replaces Teresa Kublabl.

THE ROYAL BALLET Tomor & Sat 7.30.
La Filis mel garde. Wed & Fri 7.30.

La Filis mel garde. Wed & Fri 7.30.

La Filis mel garde. Wed & Fri 7.30.

La Filis mel garde. Wed & Fri 7.30.

La Filis mel garde. Wed & Fri 7.30.

SADLER'S WELLS THEATRE, Rosebery Ave. ECI. 837 1872. CC. 837 3856. Evga 7.30, From Tomor SALLER RAMBERT. 70mor. Fri & 5at. The Tempest. Wed & Thers a special pro-gramme for schools inside the Tempest.

Thurs.
TONY
PETER
THE
MY F
most
Credit

ALBER CC. 3 Eys. 7. GEDRA CHILO 18 Yes

S.332, PANY The ! (sold out!, Piccae

ULSTER

IMEATRES	bkgs 379 6565. Ton't Tomor Wed
PM1. CC. S. 01-838 7811, at 7.50, Sat. 4.00 as 7.45, Mats. 3.00, One part. Good fri. 7.30, r 8RITTON. LIZ ROBERTSON FOR BAYLES SANNA MACKET FARE DE STANDA SANNA MACKET FARE DE STANDA SANNA MACKET FARE DE STANDA SANNA MACKET SANNA MACKET SANNA MACKET SANNA MACKET SANNA MACKET SANNA GOOD SANDA S	bkgs 379 6565. Ton't Tomor Wee 8. Thor, Fr; 7.20. Mats Thur 2.30 a.00 (Note new pert times) RI SHAKESPEARE COMFANY in receiving two productions. Pam Gems play Play With and Language with two productions. Pam Gems play Play with an an Language with two productions. Pam Gems play Play with an an Language with two play and Language Hollywood Consedy (IN A Lifetime [Mar 18 to 27]. also, at the Aldwych and Ware theatres.
BRITTON, LIZ ROBERTSON,	with two productions. Pan Gems'
WORLD'S GREATEST MUSICAL	awards as PIAF (Ton't, Tomor, Then
PAIR LADY. Good seets avril. for perfs, New booking to Oct. 1080.	And Horr and Kautman's at
t Card Hotline 836 7358.	IN A LIFETIME (Mer 18 to 27).
Y. S. From 9 am, 01-836 3673. 379 8565, Group Bkps. 839 2656. 7.45, Mat. Thur & Sat. 4.00 CALVER GE LAYTON, HELEN SHAPIRD. 0 FREE with each AUULT wall bars or under at time of ourchase.	theatres.
7.45, Mat Thur & Sat 4.00 OLIVER	PRINCE EDWARD, CC. 01-437 6
FREE with each AGULT wais	EVIL 500 Mat. Thurs. A Sac. at
VCH S CC 836 8404 Into 838	PRINCE EDWARD, CC. 01-457 6 Evgs. 9.00. Mat. Thurs. A. 34. 31 EVITA Sy The Rick stad Andrew Webber, Directed by Arauld P Group Sales Rox Office 37.9 9081,
YCH, S. CC. 836 8404. Into 838 Y. THE GREEKS. Eves 7.30 Mat- Sat 2,00. Ten't Ft 2 The MURDER OUT. Tomor Ft 3 THE GODS (said RSC also at The Warehouse and 81 8111 Theater.	PRINCE OF WALES THEATRE 930
Sat 2.00. Ton't Pt 2 THE MURDERS	PRINCE OF WALES THEATRE 330 (Credit Card bookangs 930 D846, Evenino with JOMMY STEELE and Company. Evgs. Mod. Thut. 8,30 and 832 E.D. and 832 Book now
RSC also at The Warehouse and Bi	Company Evps. Moo Thur, 8.30
Illy Theatre,	PUISENIE 5 CC 01-714 1100 P
SSADORS, S. CC. 01-888 1371. Thurs. E.DD. Frl. Sat S.DO & EMLYN WILLIAMS as Dylea as GROWING USF, "This is an ag of delight" Ev. News.	DUEEN'S. 5. CC. 01-734 1158, Pr D1-379 8081, Mon. Fri. 8. 00. Wnd. SSI. 5. 100 GOUGH, PHYLLIS CALV DESDITED TO THE PARTY BY ROSINY ACK SLOY, DY W. SOME PARTY BY ROSINY ACK SLOY, DY W. SOME PARTY BY ROSINY ACK SLOY, DY W. SOME PARTY BY ROSINY ACK WOOD SECING. O. Tai.
EMLYN WILLIAMS AS DYIES	MICHAEL GOUGH, PHYLLIS CALV
of delight" Ev. News.	BEFORE THE PARTY by Rodney Ack
O. THEATRE. CC. S. 01-837-3563.	by TDM CONTI. "A comedy r
5.30 and 8.30 TIMOTHY WEST AS	worm seeing." O. Tel.
O. THEATRE, CC. S. 01-837-3863. I sales 378 6061. Evs. 8. Mnt. Thar. S.30 ang 8.30 TIMOTHY WEST as HAM by Caryl Brahms ang Ned Juneted by Physick Garland.	RAYMOND REVUESAR, CC, 01-734 : At 7.00, 9.00, 11,00 pm. Opens ! FAUL RAYMOND presents FESTIVAL OF EROTICA. New Acts. Girls. New Thrills. 23rg sensor year. Fully air-conditioned.
THEATRE, 01-839 2133. TOM	FAUL RAYMOND Presents
SAY 8,30. Fr. and Saturday 7.00	Girls. New Thrills. 23rd sensari
THEATRE, D1-838 2153. TOM FARD'S DIRTY LINEN. MONday bo say 8.30. Fr, and Saturday 7.00 15. NOW IN ITS FOURTH YEAR. Lepticed best seats in London £3.35, £1.55, £185. £1.85, £1.85, £1.85. £4.85, £1.85, £1.85.	
£3.35, £1.55, plus 150 temp.	ROUND HOUSE 01-267 2584. OF APRIL 7th. DNLY IN AMER Devised by Ned Sherris on sons:
A. CC. S. 01-734 4291, 01-439	Leiber & Stoller.
A. CC. S. 01-734 4291. 01-439 01-734 4388. Moo. to Thors. Fri. and Sat. 6:10 and 8:50. IPI 15 5th GREAT YEAR Lowest Musical is the West End. Seats Ad. E. Reduced Rate Group 197 01-437 3856 (special afters).	ROYAL COURT. S. CC. 730 1745. Ma at 7.50. HAMLET by William Shakesm with Jonathon Pryce as Hamlet.
1. 5th GREAT YEAR LOWEST	at 7.50. HAMLET by William Shakesp
, &A. ES, Reduced Rate Group	with Jonathon Pryce as Hamiet. Sennett as Gertruse. Now Booking.
nes 01-437 3856 (special offers).	
Valker's Court, Brewer Street, CC.	DUNKAR THE ARBOR BY AND
NTS America's Sex Observ Live on	LUCY ANDERSON JONES, The 1
MARILYN CHAMBERS. Most	ROYAL COURT THEATRE UPSTAIRS. 2554. THE ARBOR BY AND DUNKAR, THE PERSONAL SPECT LHCY ANGERSON JONES. The 1 YOUNG WHITER FESTIVAL, 'cli Mar, Tues, to 5st. 7.50.
VARD THE at the Raymond Revea- valeer's Court, Brewer Street, CC. 1437 2661, PAUL RAYMOND NIS America's Sex Cheen Live on MARILYN CHAMBERS, Most born 5 prior to Americae tour. Nightly Mon-Sat. 8.0 and 10.0 pm	ST. MARTIN'S, CC. 836 1443. Eves Mailsee Tacs. at Z.85. Sats. at S. & Agatha Christie's Thir Mousetra World's Lougest-ever Run. 28th V
1965. 01-838 6059, Credit cards	Agetha Christie's THE MOUSETR
Thars. 8.00 Sat. 5.00 & E.30. THE	World's Lougest-ever Run. 28th Y Two shows Apr. 4. Gd. Fri. at 5 4
IIPGS. 01-838 6058 Credit cards of 01-858 7040, Mon. to Fri. Thars, 8,00 \$4.5.0 the Ed. O. THE BROADWAY MUSICAL WOTED MUSICAL TO THE PLAN CHICAGO BETH SEAL JENNY LOGAN, BENNETT DON FELLOWS	SAYDY THEATRE DI. 836 8888
BETH SEAL JENNY LOGAN, BENNETT, DON FELLDWS, JACKMAN, G LYONS, Redaced for parties, 379 8081, 838 8056, IS. Nurses, OAP standby £1.50.	036 0118. (Mon. Fn. 10.8). LES
for parties. 379 6061, 636 6056.	SYMS and ANDREW SACHS NOT N DARLING Mon. Thur. 8.00. Fri.
is. Nurses. OAP standby £1.50.	DARLING. MonThur. 8.00. Fri. 521. 5.35 and 8.45. Reduced orice m on Friday. Group bookings 01-838 30
Y THEATRE, CC. 830 2378. Sat. 8.00. Mat. Fri. and Sat. 8.30, ROCKY HORROR SHOW. Group	Cir Friday, Group Bookings 01-838 30
	STRANO, 01-838 2680. Evenings 8 Mais. Thars, 3,00 and 8 LONGEST RUNNING COMEDY IN WORLD NO DIRECT PARTIES. WE SHITSH DIRECT PARTIES. OI-556 2143. Gross 50x Diffee 01-579 6061.
IDN. 830 331E. CC. Bookings 379	WORLD, NO SEX PLEASE WE
Group bkgs. 836 3863, Evgs.	Credit Cards 01-856 4143. Group s
IDN, 830 331E. CC. Bookings 379 Group bkgs, 836 3863, Evgs. Sels. 8.30 and 8.30. Thus. Mat. PRICES: MON-THUR \$2, £3, £4, IMON'S LAST OF THE RED ROT S.	80x DMcs 01-379 6061.
S	VAUDEVILLE S. CC. 01-836 99 Gro. salas 379 6051. Evga 8. Sar. S and 6-30. Wed. Mat. 2.45. JAN DGILLS SHEILA GISH. JAMES COSS, In STAGE STRUCK, A new thriller Simon Gray.
OF YORK'S. CC. 836 5122. A JACKSON ROSE. A new play drew Dayles. Evgs. 8,00. Mats. 3.00. 5ats. 5.00.	and 8.30. Wed. Mat. 2.45. IAN DGIL
A JACKSON ROSE. A new play drew Davies. Evgs. 8.00. Mats.	In STAGE STRUCK, A new thriller
K. CC. 01-836 4601, Evgs. 8.00.	
X. CC. 01-836 4601, Evgs. 8.00. Fri. and Sat. 5.30 and 8.50, Hupt is DEATHTRAF.	01-834 1317. Evga. 7.30. Mats. W
THEATRE S. CC. 01-437 1592. sales 379 5081. Evga. 8.00. Mat. 1.30. Sat. S.00 and 8.15. Beryl Barry Foster. Perpy Bowles. Jan in a new olay by Peter Nichola In THE GARDENS. Oirected by Wittlame.	VICTORIA PALACE CC. 01-828 4738 01-834 1317. Evgs. 7-30. Mats. W and Sat. 3.85. ANNIE. Group sales Direc 01-378 8061.
sales 379 6081. Even B.OO. Mat. 1	
Barry Foster. Peter Bowles. Jan	Garden, Box Office 836 6808. S. Re
IN THE GARDENS. Olrected by	7.30 Howard Barker's THE LOUD BO
	WAREHOUSE, Onomay Theatre Con Garden, Bor Office 336 5808. S. Re Stakescere Combany. Ton't ang all w 7.30 Howard Barker's THE LOUD BO LIFE (not suitable for children). All s £2.10. Staffents £1.10. Adv. b Adwych.
VICH THEATRE 5. CC. 858 7755 18 8.00. MILL SAT. 2.50. PRIVATE 19 NOOL COWARD. MARIA ATT- 19 NOOL COWARD. MARIA ATT- 19 NOOL COWARD. MARIA ATT- 19 NOOL COMMITTEE STAR. 19 STAR. "An CHARRING COORING."	Aldwych.
Tresistible." E. News, MICHAEL	WESTMINSTER. CC. S. 01-034 02 RAGMAN, A NEW MUSIC MATINES DNLY UNTIL SATURO MONOAY-FRIOAY 2,00 pm. SAT. 3.
E and IAN COLLIER are excel-	MATINEES DNLY UNTIL SATUROL MONOAY-FRIDAY 2,00 pm. SAT. 3.
	WINDMILL CC. 01-437 8812 TH
RICET THEATRE, CC. 01-830	WINDINGELL CC. 01-837 8812. To nightly at 8,00 and 10,00 Suns. 6 and 8,00. Peal Raymond presents DFF. Hotter than ever for 1880. arotic experience of the modern a Fifth great year.
30 and 8.00. DOROTHY TUTIN.	arotic experience of the modern
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NATIONAL THEATRE S CC 828 2252.

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originally achedyled). Tomorrow 7:45
WHEN WE ARE MARKHED by J. 8.
Priestley. (Note: Death of 8 Salesman
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PM. THE IMPORTANCE OF BEING

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AGNEW GALLERY, 43, Old Bond St., W1, 07-629 6178. ENGLISH PICTURES FROM SUFFORK COLLECTIONS. In all gill the Saffidk Historical Charches Trast. Until 28 March. Adm. 61, Mon. Frl. 8.30-5.30. Thurs, Artil 7. FINE ART SOCIETY, 148, New Bond St., W1. 01-529 \$116. RICHARO EURICH. FURNEAUX GALLERY of Wimbledon presents new paintings by EOWARD DAWSON and PETER NEWCOMBE from 11 to 25 March at the ALPINE GALLERY. 78. 8. Assiley St. London, Allery 1. London, William 1. London William 1. London Day 1. London LEFEVRE GALLERY. 30. Bruton St., W1. 01-493 1572-3, 19th & 20th CENTURY PAINTINGS AND DRAWINGS on view. Mon-Fri. 10-S. MARLBOROUGH, 6. Albemaria St., WI, BDNNARD, BRAQUE, LEGER, SIGNAC, UTRILLO, VLAMINCK, VUILLARD, antol 22 March. Mon-Fri, 10-5.30. Sat. 10-12.80. WILDENSTRIN. Paintings from the Glasoow Art Gallery—a loan exhibition in aid of The National Art Collection Fund. Admis-sion 40p. Until 29th March. Weekdays 10-5-30. Saturoays 10-15-30, 147. New Bond Street, London, W1. REDFERN GALLERY, NORMAN STEVENS, Paistings. Drawings, Prints. March 4-26, 20. Cork Street, Loodon, W1, Mon.-Fri. 10-5.30. Sats, 10-12.30.

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† Indicate programme in

BBC 1 6.40-7.55 am Open University (Ultra high frequency only), 9.00 For Schools, Colleges. 11.25 You and Me. 11.40 For Schools, Colleges, 12.45 pm News, 1.60 Pebble Mill at One. 1.45 How Do You Do? 2.01 For Schools, Colleges, 3.15 Songs of Praise.

2.53 Regional News for England (except London). 3.55 Play School. 4.20 Deputy Dawg. 4.25 Jackanory. 4.40 Heyyy, It's the King. 5.00 John Craven'a Newsround. 5.10 Blue Peter. 5.35 Paddington

8.10 Panorama, including interview with David Steel. 9.00 News. 9.25 The Monday Film: "Welcome Home, Johany Bristol."

11.00 Film 80. 11.30 Family Ristory. 11.55 Weather/Regional News. All Regions as BBC 1 except

Wales--1.45-2.00 nm Pili Pala. 2.18-2.38 For Schools. 5.55-6.20 Wales Today. 6.45-7.15 Heddiw. 11.55 News and Weather for Wales

Scotland—11.00-11.20 am For Schools. 12.40-12.45 The Scottish News. 5.55-6.20 Reporting Scot-land. 11.55 News and Weather

Northern Ireland—3.53-3.55 pm Northern Ireland News. 5.55 Scene Around Six. 6.20-6.45 Rughy. 11.55 News and Weather

for Scotland.

For Northern Ireland.

England 5.556.20 pm Look
East (Norwich); Look North
(Leeds, Manchester, Newcastle);

Midlands Today (Birmingham); Points West (Bristol); South

South East only).

5.55 Nationwide (London and 6.20 Nationwide. 6.45 A Question of Sport.

7.15 Blake's Seven. T.T. CROSSWORD PUZZLE No. 4.227

ACROSS 1 Separate by means scientific achievement (121 10 Preasurised container making a Greek god look

somewhat hungry (7) 12 Hood commonly follows this 13 Place for relaxation giving the remainder space (44)

15 Plant, wanting in caution,

could produce an eruption

11 Nibble bis mixture, heing

back (7)

16 Song of mirth and gaiety (4) 18 Box fish from the south (4) 20 Preclude nought pertaining to verse like an indicator of change (10)

22 Troubtemaker mounted with dog. (8) 24 Desiccator from doctor that is right (5)

27 Doctor left in trea to shake 28 Reprimand for drawing hird with feathers (8-4)

26 A politician in fit of anger

DOWN 3 Two groups of soldiers drill for food (7) Competently sent inside but inattentively (8) Part of next alert story (4)

Reserve inhibition and restraint (10) A French share is not abridged (5) Two gases with lubricant may go to one's head (4-3) 8 Honest blonde with old fogy

(4-3-6)9 Smoker put in emharrassing position or hot-spot (7-6) Sneers at no changed elegance (10) 17 Listless chief who contributes nothing to the theatre

19 Wrongly amused about start of show, it could be taken for granted (7) 21 Multi-colonred soldiers in East London district (7) 23 Deal in initially explosive

is to ruah about wildly (7) 25 Mad to rise and stupefy (4) The solution to last Saturday's prize puzzle will be published with names of winners next

missile set-up (5)

Today (Southampton); Spotlight South West (Plymouth).

BBC 2 6.40-7.55 am Open University. 11.00 Play School (As BBC 1 3.55 pm).

2.15 pm Let's Go . . . and Eat 3.30 Delia Smith's Cookery

4.50 Open University. 6.55 Just Nols Rae, mime artist, clown. 7.15 Mid-evening news including sub-titles.

7.25 James Burke's Connec-8.15 Marti Caine. 9.00 Yes Minister. 9.30 Horizon.

10.20 Russian — Language and People. 10.45 Newsnight. 11.30 Arena. 12.05 am Closedown. BBC 2 Northern Ireland only-

8.15-9.00 pm On St. Patrick's Day: A Year Recalled.

LONDON 9.30 am Schools Programmes. 12.00 We'll tell you a story. 12.10 pm Raiobow. 12.30 Numbers at Work. 1.00 News, plus FT Index. 1.20 Thames News. 1.30 About Britain. 2.00 Food Wine and Friends. +2.30 Monday Matinee: "The Naked Truth."

4.15 Clapperboard. 4.45 Jukes of Piccadilly. 5.15 Money Go-Round. 5.45 News. 6.00 Thames News. 6.35 Crossroads. 7.00 The Kenny Everett Video

Show. 7.30 Coronation Street. 8.00 Rushton's Illustrated. 8.30 World in Action.

693kHz/433m

(S) Storophonic breadquast
#Madium wave
S.00 am As Radio 2. 6.00 Qevé Lea
Travis. 9.00 Semon Basss. 11.31 Poul
aurnett. 2.00 pm Andy Pesblas. 4.31
Kid Jensen. 7.00 Stayin' Alive. 8.00
Mike Read. 9.50 Newsboat. 10.00 John
Peer (5], 12.00-5.00 am As Radio 2.

RADIO 1

RADIO 2

the Music (S).

RADIO 3

10.30 The Royal Film Perform-11.15 Monday Film: Virginia Hill Story."

Radio Wavelengths

200kHz/1500m

1.20 pm Report West Heedlines. 2.00
Hers Today, 2.30 The Monday Matisas:
"The Blue Peter." S.15 Dick Tracy.
5.20 Crossroads. 5.00 Report West.
11.15 Sosp. 11.45 The Mackanzie
Affair.

BBC Radio London: 1458kHz 206m & 94.9vhf Capital Redio: 1548kHz, 194m & 95,8vhf

Gart (S]. 11.45 BSC Symphony Orcheatra (S]. 1.00 pm News. 1.05 ABC Lunchtime Concert (S). 2.05 Music lor Organ (S]. 2.50 Medines Musicale (S). 3.50 New Rocards (S). 4.55 News. 5.00 Meinly for Fleasuts (S) (4 and mond anly Irom 5.20). 7.00 Bruno Walter's Stribms, part 1. 7.30 The Vision of Piars the Ploughman (S]. 2.00 Enhms, part 2. 8.50 Tho Womm in the Apple (story by John (S) a.00 Erahms, part 2. a.50 into Worm in the Apple (story by John Chever). 9.00 Termin (S). 9.18 Men Belore Models (discussion with Professor Herbert Simon). 10.00 armsdetts Greevy song resital (S). 10.35 interval Reeding. 10.45 Resital, part 2. 11.25 Jazz in Britain: Nucleus (S). 11.55-12.00 News.

VHF enty—6.00-7.00 am and 6.20-7.00 pm Open University:

RADIO 2
5.00 am News Summary. 5.03 Rey
Moare (S) including 6.15 Pause for
Thought. 7.32 Tarry Wogen (S) includlng 8.27 Recing Bulletin, 8.45 Pause for
Thought and 8.03 Fevourite Five
Singles. 10.03 Jimmy Young (S).
12.03 pm Oavid Hemilton (S1. 2.03
Ed Stewart's Request Show (S). 4.03
Much More Music (2). 5.00 News.
5.05 Waggonera' Walk. 5.20 Much
More Music (S). 5.03 Derak Hobson
(SI. 8.02 The Organist Entertaine (S].
8.30 Folk 80 (5). 8.02 Humphrey
Lytteiton with the Best of Jazz en
records (S). 8.55 Sports Deck. 10.02
The Mondey Movie Quiz. 10.30 Ster
Sound. 11.02 Brian Matthew with
Raund Midright, Including 12.00 News.
2.02-S.00 em You and the Night and
the Music (S). RADIO 4 RADIO 4

8.00 am News Briefing. 6.70 Farm.

10g Week. 8.25 Shipping forecast.

8.30 Today Including 6.45 Prayer for

2 the 0ay, 7.00, 8.00 Today's News, 7.30,

8.30 News headines, 7.45 Thought for

the Day. 8.35 The Week on 4. 8.45

John Ebdon with the 83C Sound

Archites. 3.00 News. 9.05 Start the

Wask with Richard Baker. 9.55

Children's Country Holideys Fund.

10.00 News. 10.95 Mehay Bex. 10.30

0 aily Sereice. 10.45 Story Time. 11.00

News. 11.05 A Froth of Admirato.

11.50 Postry Piecsel 12.00 News.

12.02 pm You-end Yours. 12.27 Scan

of Britain 1980 (S). 12.55 Weether;

programme news. 1.00 The World at One. 1.40 The Archers. 1.25 Shipping farecast. 2.00 News. 2.02 Warmen's Hour. 3.00 News. 3.02 Listen with Mather. 3.16 Afternoon Thester (5). 4.45 Short Stary. e.00 PM: news magazina. 5.50 Shipping lorocoot. 5.85 Weether: programma news. 5.00 News. 5.30 Frank. Muir Goes Into . . . Science (5). 7.00 News, 7.05 The Archere. 7.20 Science New. 7.45 "Equas," (play) [5]. 9.40 News. 7.45 "Equus." (play] [S). 9.40
Kajadoscope. 9.59 Westher. 10.00
The World Tonight. 10.30 The Nawa
Quiz (S). 11.00 A Book at &editms.
11.15 The Financial World Tanight.
11.30 Today in Porlisment. 12.00 News. 5.00 am As Radio 2. 6.30 Rush Hour. 10.03 The Bobble: Vincent Telephone Programme. 1.03 pm London Live from the Ideal Henra Exhibition. 2.03 John Togood's Showdess. 4.30 London Naws Ossk. 5.35 Look, Stop, Listen. 7.03 Black Londoners. 8.00 Question Time from the House of Commons. 9.00-5.00 am Join Radio 2.

London Broadcasting 6.00 am AM with Bob Noiness and Dougles Cameron. 10.00 The Brian Nayes Show. 72.00 LBC Reports. 8.00 pm After Eight Special: (00 it Yourself). 9.00 Nightime—Mike Dickin. 12.00 LBC Reports Midnight. 1.00 am Night Extra—Tere Jefferies: 5.00 Morning Music. Capital Radio

5.00 am Breakfest Show with Mike Smith (S]. 9.00 Michael Aspel (S]. 12.00 Osve Cash (S). 3.00 pm Rogor Scott (S). 7.00 London Todoy (S). 7.30 Adrion Lova's Open Line (S). 9.00 Alap ("Flull") Freemen (S). 11.00 Tony Myatt's Late Show (S). 2.00 am paior Young's Night Flight (S).

المكذامن المثمل

#8.55 am Weather. 7.00 News. 7.05 Overture (S). 8.00 News. 8.05 Morning Cancert (S]. 9.00 News. 9.05 This Weok's Composer: Holat (S]. 19.00 Violin Sonetes (S). 10.50 Mozert con-

and Mozambique. report.

Lonrho's applications those orders was made in connection with an arbitration to which not only BP and Shell but also Loorho and a Mozambique

The dispute to be settled hy arbitration was a claim by Longto and the Mozambique

eastern Rhodesia.
The claim consisted of various allegations, including a con-

the convenience of any lingation month, the court rejected an or arbitration and the law does appeal by Lonrho against a not always seek to strike while The basis of the Court of Appeal'a earlier decision was that the documents in the possession of Shell's and BP's sub-

sidiaries in Rhodesia, South Africa and Mozamhique were neither in the possession, nor in the custody, nor in the power of Shell or BP. Consequently, neither Shell nor BP could he ordered by any court to disclose any of those documents.

The hasis of the court's later decision was that it would be contrary to the public interest to order disclosure of documents revealed in confidence to, and accepted in confidence at an inquiry held in private at the request of the Foreign Secretary at the relevant time.

Lourho has been granted leave to appeal to the House paoy could be said to he his alter ego. But subsidiaries of of Lords against hoth decisions. In view of recent classes multi-national companies, interpretation to see whether on much locally controlled with this occasion the Lords reach local directors.

disappoinated recently. He had run poorly to his two races before last year's triumph, however, and it is worth noting that his recent poor showings -at Wincanton and Sandown -came over trips which are now on the sharp side for him.

whom he has been set to give 5 to and 15 lh respectively, will provide stiff opposition. Thera was no fluke about Coolishall's four-length success over the former Gold Cup

12.40 Close: Personal choice with Leslie Crowther.
All IBA Regions as London except at the following times:— ANGLIA

1.25 pm Anglia Naws. 2.00 Monday
Film Matines: "Orlve Hard, Onve
Fest," starring John Collins. 3.45
Food, Wina and Friends. S.15 Univesisity Challenge. 6.00 About Angha.
11.15 Musical Special (concert by
Benny Goodman]. 12.10 sm Roflection.

ATV
1.20 pm ATV Newsdeck. 2.00. Rendezvous with Romance; "The End of the Affair," sterring Oebotsh Korr and Ven Johnson. 3.45 Food, Vince and Friends. 5.15 The Talevision Programme. e.00 ATV Today, 10.35 Left. Right and Centre. 11.00 ATV Newsdesk. 11.05 The Royal Film Performance 1380. 11.50 Olivorco and Aftar. 12.20 am Something Official

BORDER

1.22 pm Bordar News. 2.00 Food, Wina and Friends. 2.30 Monday Metines: "Temehine." 6.15 University Challenge. 6.00 Lockcround Monday, 6.15 Collecting with Curda, 11.15 Twist in the Tale. 12.15 am Bordar News CHANNEL

1.20 pm Channel Lunchtime News, What's On Whore and Washer. 72.00 The Monday Matines: "The Mudiark."
3.45 Food, Wine and Friends. 5.15 University Chellenge. 6.00 Channel News. 6.10 Spidermen 10.28 Channel Late News. 11.15 Fentacy Island.
12.10 am News and Weether in French.

GRAMPIAN
9.25 em First Thing. 1.20 pm North
News. 2.30 Mondey Matines: "Foat
Ageins! the Oesert." 5.15 Wide Wild
World of Animela. 8.00 North Tonight
and Area Wasther Forecast, 11.15
Reflections. 11.20 Tee New Avangers,
12.20 em North Hesdlinas.

Monday Metines: "Street Corner."
3.45 Food. Wine and Friends. 5.10
This is Your Right. 5.16 Crossroads,
6.00 Granada Reports 6.30 Solwyn.
11,15 Mystary and Imagination " Gone
to Ground."

GRANADA

1.20 pm Calenda Novs. 12.00 Monday Matines: "A Fronch Mistress."
3.45 Food, Wine and Friends. 5.15 Univasisty Challongs. 6.00 Calendar (Emloy Moor and Balmont additions).
3.00 George and Mildred. 11.15 S.W.A.T. 12.15 em George Momitton IV.

BBC Radio London

Theatre Royal, Haymarket

Reflections

Northumbrian ready made are a set of drives to behave unpredictably.
to which a 20th century This is what Mr. Peacock has to which a 20th century audience might he expected to

ing justice to its own ends.

John Peacock belps himself to all of these ingredients and stirs them patiently into his lady is truly doomed and st lsst when Mme du Barry, making a prepares to re-enact the royal fourth visit to London after the role. assassination of the Duc de Brissac, foolbardily determined nation between them is perto return to France. He sets it formed impeccably by these two in her elegant salon now a sbamhles with its wells dis-figured by graffiti and its great

chandeller in ruina. At the centre of the wreck stands Greive in his citizen's tor Keith Hack can do to vivify uniform ordering ber maids Bengalese servant. The shaven skull, the of Donald Pleasance establish at once a strongly malevolent presence for the role. As he instructs Gordon Gostelow's bumbling elerk to make an inventory of all the dn Barry's possessions we await the appearance of the lady.

It is not long before the doorway frames a radient Dorothy
Tutin in s tightly-waisted, volu-

Barry and George Greive, the poised and disbelieving that any revolutionary, serious harm might threaten her who descended upoo har from this odlous little man, If chatean at Louveciennes in only appearances could breatha 1793, and bounded her to the life into a play made from hisguillotine, is a version of tory sll would he well. But this Beanty and the Beast composed is not Mme. Tussauds and somehy history. It seems odd that bow these aplendid waxworks no-one should have tried to must be given life. They must dramatise it before now. Here engage with each other and start

the greatest difficulty in making relate, envy, sexuality, privithem do. Eventually he suggests ledged elitism under threat that Greive and du Barry are from levelling fervour pervert-ing justice to its own ends. opposite sides. Both are upstarts; hoth are ambitious; both want power and both value possessions. The mirrors and play, but he has some difficulty the chandeliar are reptaced; the in getting the mixture to rise room restored to its pristine until the final scene when the glory when it was the lovecbsmber of a monarch. And begins to cealise the fact. He Greive whom we guessed is picks up the story at the point physically covetous of due Barry

> principals who cosx and then grapple with aach other but somehow it never entirely loses lts waxworks flavour and there is nothing much that the direc In the same stilted style the treachery of the hlack boy Zamor (Jeffery Kissoon) who sides with the citizens and signs the petitions denouncing the cevolutionaries bss less impact

> than it might.
> Still, it is a change for us to see a costume plsy on the West End stage in which a period is taken at its face value. If wit and bite are rather sparse there are nonetheless some

ANTHONY CURTIS



Roger Taylor Dorothy Tutin and Donald Pleasence

Wigmore Hall

Academy Octet

the-Fields Octet was created in Allegri Quartet, with collective an extempt to recapture "some-thing of the sensibility" of the Academy's earliest concerts in of a dozen players and its reperpersonal the tempo at the toire was exclusively baroque slowest limit of Allegro non But now the Octet is moving luto chamber music as well. On objectively poised and etoliated Saturday evening at the Wigmoce Hall it demonstrated the subject from the first cetlo rewards of tackling sextets and octets as a scaling down of a larger ensemble, rather than as involvement, in which textures an nd hoc expansion of an remained always lucid—partly established string quartet.

The remained always lucid—partly thanks to Brahms's skill, but

For this concert it was led by hece less self-conscious than variations. The finale displayed

The Academy of St. Martin-in- when he was leader of the the ability of the Octet most responsibility weighing more heavily. The opening of the emy's earliest concerts in Brahms Sextet in G major, when the group consisted indeed, was almost too imtroppo, the first violin's melody thanks to Brahms's skill, but To view the Academy Octet also to intelligent, unselfish perenticely as its pscent orchestra formance. A scherzo, too, of writ small would be s mistake, extreme limpidity, paid divi-for this concert it was led by dends, but the Poco Adsgio Hugh Maguire, highly ex-perienced in quartet playing, yet more flesh on the bones of the

forcefully, its experience in fusing the most precise highspeed howing with effortlessly comprehensible axpression.

The Mendetssobn Octet is similarly an ideal vehicle for these players. Chamber sonorities were here abandoned for block orchestration and strenuous attention to dynamics. Again the opening was tents-tive, suspicious of the flood of invention, unwilling to yield to its spontaneity. That soon passed, however, and some moments of uncertain balance in the Andante aside, the rest of the work was confidently expansive, rough-hewn textures juxtaposed with the lightest.

most casually exact articulation.

The City University, EC1

Music at TCU

by DOMINIC GILL

The City University in St. and composition, wece remark-John Street offers a music ably high. degree course of unusually broad base: not tha traditional

electro-acoustic music studio—
which is still expanding,
shackled only (like music
departments everywhere, except
perhaps that of the Ministry of
Defence) by lack of funds Par Defence) by lack of funds. But even financially, TCU bave been luckier than some. Their studio is about to move into newly-converted premises in the base-economy of working. ment of the university's Centre for Arts; and work thece in the field of "electro-acoustics" in tha widest sense, from bighquality recording pure snd simple to research into electronics and computer controls, will rely in its line of development less on vastly expensive and elsborate bardware systems (like IRCAM's in Paris) than on smatler, more flexible and much cheaper systems of micro-

From the start, one or another aspect of the studio has of the recent work of its com-posers and performers in three public programmes entitled "Electro-Acoustics in Concert."
It was an event of substantial schievement, as well as firm promise: programmes unfolded without technical hitch; each bore the mark of careful and imaginative planning, standards Adams. Phrygian Gates is essenness, and its sexiness too, with generally, both of performance tially a sort of sweet-toothed marvellous vigour.

B.Mus., but a B.Sc.Mus. condensed into one. Three Tubular Bells. Adams has embracing a wide range of musi-pieces of pure tape-music all declared, "In America we are cal studies from acoustics, msde a strong impression, and tirad of theory; we are trying aesthetics, ethnomusicology and two of those especially, by the the psycbology of music to postgraduate student Alejandro general music theory and, Vinao, for their variety of gesespecially, performance—this last emphasised by close links Danza paral un folklore imaginate the Guildhall School nario emhellished a dark. This broad outlook helps to unrelenting ostinato tread with make TCU's one of the liveliest. a tracery of melody and texture, in spite of being also one of elaborately manipulated among the smallest and newest, music four loudspeakers. Longer, and facolties in the country: the still more elsboraie, was Vinao's closest parallel is perhaps with Una Orquestra Imaginaria— York in its early days—York dense enough in its movement, gradustes indeed number sig- and in its exuberantly orchestral nificantly among the teaching conception, to demand many staff. more hearings, but powerful enough all the same at first meeting to justify the prize it

> music really "examine a relationship"?), but persuasive in its dramatic shaping, pleas-ing for its clarity of idea and The only substantial disap-pointment of the three programmes was not, as it turned out, a contribution from the university at all. Three short

pieces offered by tha Canadlan horn-plsyer James MacDonald for amplified born and tape were unspecial, unsurprising and the hest of them, s Fantasia Van Horn Boogie by Steve aense. That was a memorshle Ingram had no born in it at all: high point; but the highest, and

fine conviction and no little bravura, the 30-minute piano

systems music which stands in the same relation to Steve What in justice calls for the Reich's Drumming as, for space of three reviews must be example, Mike Oldfield's Oldfield's postgraduate student Alejandro from the basic misapprebension Vinao, for their variety of gesthat the two are incompatible, from the basic misapprebension ture and richness of colouring. why is it that the search for magic, from Messiaen to Stockbsusen to Pink Floyd, so often leads no farther than the trinmphant cediscovery of

> A major contribution to the first and last concerts was made by TCU's resident vocal group Vocem, singing music for aolo voices amplified (or otherwise electronically treated). The last three minutes or so of Simon Emmerson's Ophelin's Dream I were the most enclanting: a dense currain of electronic reverberation built up from an assortment of phonemes. The digital echo for Kevin Jones' Text Years (a bad pun on textures "?) seemed either net to be working very well, or in sny case not to add s great deal to the effect—I wssn't surprised to learn that the piece had been originally conceived with larger

Where the murmurs die, a new piece by Alsn Belk, wss an unsshsmedly Beiro-inspired essay admirably accomplished in construction, and well presented; but more original, and far more gripping. was Mr. Belk's own account of for horns by Hildegard Wester-kamp, I suspect would have had stronger impact left in its superb confidence and just the original form for tape slone. right pinch of bard dramatic Van Horn Boogie by Steve aense. That was a memorshle another aspect of the studio has played a fundamental role in the music course's curriculum; and on Wednesday and Thursday last week, TCU offeced some of the recent work of its com-

long time whose performsnee is actually upstaged by the composer's own programme note.

Mr. Lockett also played, with fine conviction and no little fine con and they caught all the vital plece Phrygian Gates by the elements of the music, its Californisn composer John humour, pathos and sensuous-

Sheffield Crucible

The Summer Party

by MICHAEL COVENEY

After baving bis wings singed Peter James's luscious and company scurrying for shelter. with the commercial flop of City Sugor, It is good to find Stepben Pollakoff reasserting bimself on a large stage in front of a large

physically contained on the stage by both an acea designed for his operation and a symbol, s car that represents anthority and his bed for the night. The rest is s tree and s green sward, where s distraught sponsor, his photographer wife, s detained typist, and two-well-costrasted policemen, fill in the pictuce.

Kramer's task is to keep the crowd bappy by exerting cepressive but humane control. But he also wanta the evening to succeed. As do we sll. That success is threatened by the sulky arrival of a punk boy king who smashes glass by staring at it and cesistance by ignoring it.

Several stunning theatrical coups jolt what occasionally becomes a static discussion area ANDREW CLEMENTS misdirected laser show has the

events backstage at a pop-concert near Southampton develops both Pollakoff's obses-ion with white the pop-develops to the pollakoff's obses-tion with the pop-seductivety superceding the grassy knoll, the hoy cedeems himself in our eyes by failing sion with youth culture and s after a massive build-up and s marvellous escapade in character portrayal. The central wings of s. dove." The play character is a bigh-flying chief kicks when Kramer fails to constable, Kramer, who ends up elicit sn apology from the typist being the star of the show he (Patti Love) snd sends ber off bas come to patrot. Like all on a trumped-up charge. He Poliakoff's major portrsyals, goes to sleep in bis car, having Kramer'a life and philosophy is saved the day by introducing the baying, unseen mob to the delights of the dawn.

As Kramer, Brian Cox, an actor who never fails to delight and intrigue, employs his con-siderable tslent of Celtic understatement and crsggy suthority to fascinating effect. The host couple ace well played by Alan resemblance to a sort of new wave Alan Badel each time I see him) and a charmingly selfawsce Hayley Mills. Miss Mills even scores with comic lines that you would expect her to flinch at, prospering as they do st the expense of the ides of a Mayfair good-time girl exposed to the glsce of publicity. Lovely work, too, by Mark Drewry as a young copper unhottling marital woes with the cham-pagne and little Dexter Fletcher ss the terifying child

Covent Garden

JIOT1A by CLEMENT CRISP

MacMillan's choreography since made for American Ballet Theatre over 20 years ago. Two major works of his maturity Das Lied ron der Erde and Requiem, have shown how potent is the response which this theme excites in his chorecgraphy. Now, in a setting of the Poulenc Glorio which received its first performance on Thursday, MacMillan returns to this same subject, to magnificent effect.

The immediate pretext for the work is that lost generation who felt the full brunt of the First World Wsr. As programme note MacMillsn quotes a poem hy Vera Brittsin from Testoment of Youth The crucial lines which help fix the mood of Gloria run: "But in that song we heard no warning chime,/ nor visualised in hours henign and sweet/The threatening woe that our adventurous feet/ Would starkly meet."

The fine setting by Andy Klunder, cecently graduated from the Slade School — is a skeletal metal frsme placed on a rising slope of ground. The slope. They are revenants, the girls ghost-grey, the men in tights that seem rotted, vestigial uniforms, and wearing tin hats.

The bsllet's progress is a contemptation of lost bopes, lost joys, lost selves. And as so often with MacMillan, the Anastasia; La fin du jour-is a matter of fixing feeling snd attitudes rather than of s superficial naturalism. The choreo-graphy uses a large cast, but is centred upon s trio-Jennifer Penney, Wsyne Eagling, Julian Hosking—and a quartet in which Anthony Dowson, Ross MacGibbon and Ashley Page support Wendy Ellis. There is no identification of relationships, though Testament of Youth may suggest certain parallels, and the true importance of the ballet lies in the thrillingly inventive, ricb and entirely apt movement that theme and score have inspired in MacMillan.

the asrly Journey which he sffection; the succeeding Domine Fili unigenite, musically joyous, Wendy Ellis and ber companions. The miserere nobis ing caught in poses of heart-stirring sculptural beauty. Everywbere, MacMillan finds daoce imagery that matches both the gravity and the happier aspirations of his score, suggesting that his ghosts aurvey

finds Penney, Eagling and Hoskwbat was, and what might bave felt in the writing for Eagling.

Desth and the after life has To the soprano solo Domine of the hallet when his com-been an inspiration for Kenneth Deus there is a duet for Penney panions have returned to their and Hosking of gentle, trusting rest-like troops going over thetop into action-and he makes a last rearing circuit of the stage is no less so in the writing for before plummeting backwards out of sight. Performances are magnificent.

Peoney, Eagling, Hosking; Wendy Ellis and her com-panions, all are seen at their best. Musically Gloria is no less commendable, will Teresa Cahill and a section of the Opera chorua under Ashley Lawrence.

About this notable acquisition been, with some dispassion. If to the repertory, and the there is the bitterness of regret admirably re-dressed and re-dressed and and accusation, it is most clearly revised—though under-danced -Four Seosons, more after a to whom falls the final section later performance.



Julian Hosking, Jennifer Penney and Wayne Eagling in ' Gtoria'

Goldsmiths' Hall

Kennedy/Demenga

by ANDREW CLEMENTS

opulent surroundings of the Goldsmiths' Hall. But Nigel Kennedy and Thomas Demenga make a well-balanced young team, both of them fluent technicians of clear, muscular tone, snd respectful, considered in-terpreters. They hegan their

susterity, the Sonata for violin cian c and cello of 1922—Ravel at his Bach most laconic and, to my ears at least, most ccedible. Kennedy and Demenga did Authors' award

not go out of their collective Kingstey Amis has chosen way to avoid dryness - The Pitnie Plot (Heinemann) as the outer movements were the most promising first novel confined as severe, intellectual of 1979, exercises, their tricksy page, received a silver-mounted principle of the surface bitional effects scrupulously and quill at a dinner at the rendered and valuable self-deprecating moments of Martin Page a formula to the deprecating moments of deprecating moments of wit were ss a rule overlooked. The throwaway ending of the Tres rif was simply that—thrown swsy-and only the Lent emerged whole. A performance The Authors' Club First in the making stilt, perhaps. Novet Award was founded by sleesdy wonderfully precise but Laurence Meynelt in 1954. Past not yet ripe and flexible.

Kodaly's Duo poses fewer problems of an intuitive kind (1964) and Paul Bailey (1967). Demengs played it quite Peocock.

Duos and solos for violin and superbly: difficult to imagine a selected the third cello suite, cello seem austere fare for the better version by non-Mr. Kennedy the G minor opulent surroundings of the Hungarian performers unless it violin sonata. The former was be by an equally accomplished duo of greater richness and warmth, more willing to experi-ment with nuance. Emotions were held on the tightest of

correspondent of the Daily Express, has previously published a satirical anthology of big business called The Com-

pony Sorone.
The Authors' Club First winners include: Alan Siltitos (1958), Robin Douglas-Home

the more interesting, perhaps thought through, yet sacrificing articulation for fleetuess in the Conrante and lured into unreins throughout: unexpected worthy indulgence by the paput-frissons were confined to awe larity of the Bourdes. Mr. recital for the City Music Society at the accuracy of Mr. Kennedy's Kennedy played his sonata on Thursday evening with high E-string playing. Example the duots each musi- of a less than beautiful sound. cian contributed a substantial but behind the notes there Bach solo. Mr. Demenga seemed little substance.

Schnittke premiere

The BBC Symphony Orchestra is to give the world premiere of Alfred Schnittke's Symphony St. Florion, subtitled "Missa Invisibilia," on Wednesday April 23 at 8.00 p.m. at the Festival Halt.

> The symphony is a BBC commission and the composer is hoping to be in England to attend its rehearsals under the BBC SO's chief conductor Gennadi Rozhdestvensky.

Schnittke is one of the Soviet Uniou's leading composers who and demands a more conventually Last year. Katherine Gordon reconcile Western avant-garde tional bravura. Kennedy and won the award for The Emerald techniques with traditional

RUGBY UNION BY PETER ROBBINS

A great day for England and rugby | How Forest gave away the Cup

the Argentine and New Zealand, finishing pace or polish. for the dedication to what coach Mike Davis and the selectors. Davis prepared his squad backs.
beautifully for each game and The Scottish second row. I

had such success and the spirit memories. What a joy to see two sides using skill and intelligence to win rather than just the bindgeon of physical hulk. England or Scotland but fpr the game and its traditions.

widened the horizons of the felt, had the hetter of things in team and the individuals the line-out, except in the vital occurand's coach, Nairn McEwan, secondary possession, where also commands admiration for Beaumont, Cotton and Uttley the job he has done for his moved more quickly onto the Not since 1957 have England ad such success and the spirit over into the mauls and rucks of the game also brought back in the first half, and Horton's accurate kicking pushed

Scotland indicated their own It was a great day not just for stlack from Rutherford but, On Saturday, England pro- choices that England enjoyed duced a revealingly expansive in the first balf. Those choices game when they needed to. gave Woodward the chance to set up. Beattle once again cannot possibly ha long before Scotland, to their eternal demonstrate his pace and showed some moments of hrilcredit, responded with some subtlety.

pressure was possible only because of the good distribution of tha team great confidence hy his superb fielding.

goal to reviva Scottish hopes. It was then that the whole significance of the England performance was encapsulated in a series of four successful rucks before Smith scored.

and then Carleton gathered a belpful bounce from a delicately-placed chip from Dodge. That made it 12-30 to England, and they were only too glad to hear the whistle go hecause of disappointment with these

increase in the rucked posses- with gratitude to the senior sion, which Leslie and Beattle members. As for Scotland, it liance and the very highest of their labours.

such clinical pressure, but such Scottish surge up front was sternly contested by England League Cup at Wembley on but Laidlaw and Rotherford, Saturday but rather of presentmore libarated at half hack

real deus ex machina, along with Renwick and Johnston, daring which went into it.

they were finally thwarted not just by the 12 points but by 12-23 when England had the some outstanding defence from plece of lnck all confident sides. Dodge and Woodward in the welcome. Hare kicked a penalty, centre and Utiley and Neary round the fringes. Neary set a new record for England's players with his 43rd appearance.

coing at them.

Scotland's revival was possible content with heing part of hecause Gray and Tomes English rugby history. The steadily won more line-out young can look formal halis and thece was a significant. their young lions earn the fruits

SOCCER BY TREVOR BAILEY

ing it to a grateful, if somewhat limited, Wolverhampton Wanderers, who were no better nor worse than an average First Division team in a non-vintage season.

Forest failed because they gave away a fatuous goal in the 67th minute when Shifton and Needham collided and, despite superiority and numerous chances, were unable to score themselvea

This surprising and unnecessary defeat means that for the first time since the Clough-Taylor partnership steered them into the First Division they finished without a major honour.

Everything now depends on more penetration up from than against Wolves to go further in some. the Europesn Cup.

much failing to achieve a major second half, one cannot help success after two memorable feeling that if he had started aeasons but that this could mean there before Wolves settled ably he on the wane. Incuitably and made one mistake, goes no European footbail next down he would have exploited the years must have drained down, rather sadly, as the vilwinter as it is increasingly until the obvious weaknesses of the away some of his charisma, lain of the piece.

IT WAS not so much a case of likely that their final place in two opposing centre backs.

Nottingham Forest losing the the League table will be high

League Cup at Wembley on enough.

two opposing centre backs.

Secondly the club have n

adequately replaced the d

Without the extra revenue from this competition a club cost of their new stand and relatively small gates might have financial problems.

There are several reasons merely good one.

First, since the departure of their leading goal-scorer in League Cup matches this season, they bave lacked an executioner up front to combine with Birtles, who has not scored as frequently as usual and must have lost confidence.

This could be seen on Saturday, when O'Neill, a goalthe outcome of the match in conscious wing-half-cum-winger not been for that one unforced East Germany next week against rather than a front-runner, was Dynamo, who siready have used to partner him throughout established a one-goal lead in the first half, with Francis emthe first leg. Forest will need ployed largely as right-hand member of their midfield four-

Although Francis was moved Their real worry is not so into the centre for part of the

adequately replaced the drive, all before, passion and skill of Gemmill in Apart for

periods against Wolves.

Thirdly. Forest are at their to this fine club. most effective breaking quickly why Forest have declined from after a period of intense pres- passport to Europe, but they an outstanding tesm into a sure, footballing counter- will oeed to impruve if they punchers. They possibly suffered are to make much impression, from too much possession on sootething of which John Barn-Woodcock, significantly still Saturday, while opposing sides well, who has done so much are also beginning to understand to revitalise them, must be nnly their style, which has not too aware, changed since they arrived in Their talented and expensive the First Division.

even more important never made a mistake, has become human this aeason. If it had been on Forest winning in extra final. time,

Finally, the magic of Brian that Bradshaw, who made Clough, which to some extent several errors, several fortu-

which produced the motivation. Secondly the club have never because the team has heard it

Apart from the League Cup midfield. He also had the ability in 1974, supporters of Wolves with their high wage bill, the to hring out the best in Robert- have savoured little success son, who disappeared for tong since the 1950s, so that it was good to see some glory come

Their victory also provides a

lead forwards Grey and Richards Fourthly, Shilton, who was deaerve a much better service, not only a brilliant 'keeper, but white the crossing of Daniel from the right and Eves from the left lacked accurancy.

In midfield Carr and Hibbitt hrought some touches of class error, my money would have to an interesting, if mediocre

consists of convincing his nate saves, and looked uncerplayers that they are better tain every time the half was than they are, and therefore crossed in the air, came off enabling them to play above an undefeated hero, while their ability, could understand. Shitton, who had little to do

The most bronic feature was

RT GALLERIS

AFTER AN improbable start dazzling approach work which to the sesson in matches against unfortunately was limited in its

It was in fact a game of two 30—18, have simultaneously distinct halves and fortunately of the hard-won possession, and England had 19 points in the also because Hare gave the rest carried off the greatest prices England had 19 points in the in rugby: the Calcutta Cup, the bank at half tima. The valuable Triple Crown, the championship, lead was earned yet again by and of course the Grand Slam. the machine-like performance If the major share of the of the pack. Essentially the accolade goes to the players game was won by England's marvellous front five, but this seemed a bopeless task in is not to decry the efforts of November, one must never over the back row. The sight of the look the part played by the Scottish scrum on the retreat was a great tonic to England's

England forward ruthlessly.

aspirations with a aharp counterdeprived of possession, they did not have anything like the

Scotland had to cave in before

So England led by 16 points at half-time and were apparently running away with things, but Irvine kicked a second penalty Scotland had got back to

ran from everywhere.
Yet it was Irvine, so dismal against the Walsh, who was the

Tomes's try actually went through 14 pairs of bands, and that figure does not in any way account for the skill, speed and Scotland can indeed be proud of the way they played and

It was fitting for him to come off the field after so many years

MI MONEY SUPPLY

US ECONOMY: KEY INDICATORS

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Monday March 17 1980

A determined Mr. Carter

financial package is clear and important. The President has urging banks not to seek the decided against the usual margin over the cost of conventional wisdom of both marginal funds when pricing politics and of Wall Street, that determined assault on inflation is now an overriding electoral necessity, as well as a combination ctear national priority. He has marginal pena deliberately chosen a number of measures generally of measures general considered to be vote-losers-Budget cuts, the tax on petrol, restrictions on consumer credit -to drive this message home. Technically, the measures are rather tess radical than some earlier packages, and official forecasts of the likely result are so tentative as to be invisible, but the measage remains clear: the President

will go on trying till he gets

Fine tuning

There has naturally been some scepticism in the first reaction to the measures themselves. There have been too many packages, and too many faulty forecasts, to allow general confidence that just this, and no more, is what Is required. The fiscal proposals are aimed at a balanced Federal Budget, a figure of some symbolic importance, and the fulfiloient of a 1976 election pledge. However, a balance in the U.S. Federal Budget Is not by any means the stern slance which the same term would imply, say, in the UK. The proliferation of off-Budget agencies, the large share of welfare spending carried by local budgets, and the fact that nearly all public utilities are privately financed. mean that the Federal fiscal balance is uf secondary importance, Certainly the \$15hn cuts proposed are the finest of fine turning when measured against the size of the U.S.

The monetary measures are also open to the comment that there is rather less in them than meets, the eye. In some respects they mark an Important extension of credit control. notably in the reserve requiremenis now imposed on large collapse. hanks which are not members of the Federal Reserve system and on such new intermediarles as the money market mutual funds. On the other hand there different story for some time are extensive loopholes in the vet. The markets should not be new restraints, to spare such ruled by one set of statistics. already depressed sectors as The U.S. economy has had a few

Equally, the Fed has done

THE CENTRAL message of forcing interest rates up any President Carter's latest further, leaving the official discount rate unchanged, and loans. The aim is clearly to induce unofficial credit rationing so far as possible. of corset-like marginal penalties and official guidance on priorities is very familiar in the UK.

It would be quite wrong, though, to look at this package In isolation, and conclude that nothing very drastic has been done to address the basic problems. It is the cumulative effect of all the measures taken over the past 18 months, and especially since October 6,

which ought to be assessed. There has been an enormous rise in interest rates, and an inprecedented collapse of the running the risk of alienating long-term bond market. The precisely those constituencies dollar has recovered sharply. despite large-scale intervention In restity, the political risks to support what have now become weaker currencles. Consumer credit demand in the tis has begun to ease, and some Industries relving on borrowed funds to finance longterm investments are already in some difficulty. Most dram-atically, the commodity market has topped out and relapsed.

It is not at all surprising tha some of the most striking initial effects of U.S. credit restraint should have been seen in Inter netional markets.

Imposing strain

However, domestic results have been evident and, indeed, the Fed had strong reasons for treading delicately in its latest measures. The collapse of the hond market—a normal and unhappy result of lonation psychology—is a structural change of fundamental Importnoce. The corporate sector will be more dependent than in the past oo bank finance. A regime of high interest rates is also imposing strain on financial institutions. All this will help to induce caution and policy must aliu for restraint, not

In our judgment, then, the measures will prove adequate, though figures for loan demand and money growth may tell a weeks to get used to a strong dollar. It must now begin to count also on a determined

The threat to Europe

THE BEHAVIOUR of the cuss the issue under negotiareform of the European Com a settlement at the next sum-munity's budgelary system is mlt. It is not entirely surprisordinary, and more and more in Germany have been suggest-dangerous. Until recently, it ing that the summit should be classic foot-dragging tactics such a suggestion is obviously familiar from many previous intended to be more concilianegotiations, in order to minimise the concessions which and if adopted could only might have to be offered at the increase the tension between erd of the day. Since tast week's Cabinet meeting, however, it almost looks as if the French Government is deliberately attempting to escalate the conflict with Britain, and thus risk turning what should be an important house-keeping Issue into a major political battle.

Political row

ment to underestimate the members of the Community in lengths to which lhe British order to help finance an indeto ensure that the hudgetary policy. question is taken seriously and dealt with equitably. In the second place, the European This would be lamentable. Community, and the Western The French President is facing world in general, cannot afford, re-election next year, and no In the wake of the troubles in

It must be admitted that the British Government has not handled its side of the negotia- recognise that France, and the tions with much subtlety or European Community, and imagination. By insisting that Britain, for that matter, could the budget be treated in isola- suffer serious damage unless tion, rather than in a larger be and the other heads of govpackage of issues, it has played ernment buckle down to defusinto the hands of those in lng the budgetary issue. French France who are reluctant to nationalism bas always taken make any concession. But when satisfaction from the fact that the French Cabinet issues an the common agricultural policy explicit threat that It may not is the Community's only major even agree to discuss the policy. But even the French budgetary issue at the next must be aware of the old busi-European summit, the stage is ness adage that it is dangerous clearly being set for a major to drive too hard a bargain,

confrontation. Ostensibly, this threat would ment is prepared to say out nity interests may be gratuitloud that it may not even dis- ously undermined.

French Government over the tion, it raises the question British deciand for a substantial whether it intenda to permit becoming more and more extra- ing therefore that some voices seemed to be employing the postponed or cancelled though tory to France than to Britain. increase the tension between Britain and the rest of the Community. Mrs. Thatcher has made it

abundantly clear that her Government has no intention of entemplating withdrawai from the Community nor even of adopting an empty chair policy. the has also made it clear that she will not rest until there is some kind of settlement This could be extremely dan- which would relieve the UK of gerous, for two reasons. In the the obtigation, at once absurd first place it would be very and inequitable, to make large unwise for the French Govern- net transfers to other, richer Government might be provoked fensible common agricultural

Damage

doubt wishes to pre-empt the Iran and the Soviet invasion of Gaullists on his right. But all Afghanistan, a serious political governments in Europe have row hetween Britain and France. serious political and economic problems at home, and M. Giscard d'Estaing must surely because such hargains do not last. In 1965-66 General de only be operative if the Com- Gaulle asserted that national mission fails to put forward a vital interests should take preformal proposal in good time, cedence over Community but this condition does nothing interests. Unless the budgetary to hide the barshness of the issue is sorted out rapidly, the threat. If the French Govern- very notion of mutual Commu-

A President in unmapped territory

By JUREK MARTIN in Washington and STEWART FLEMING in New York

to meet the challenges facing the nation—has become, alx scant weeks later, nothing of tbe aort.

It is candid, too, the argument runs, for a sitting president to have the nerve to introduce the sort of measures Mr. Carter has done in the thick of an election year, thus precisely those constituencies whose support he must court. may he over-stated since it appears, unless lightning strikes that nothing that Senator Kennedy says or does is going to win him the Democratic Party's nomination, while the Republicana seem intent on pro-viding an alternative to Mr. Carter in the person of Mr. Ronald Reagan, who could be unelectable in November.

It is also a mark of candour these days for senior officials of the Administration to admit that—just as they were taken unawares, they claim, by the surge in both inflation and inflationary expectations in the first two months of the yearthey really do not have a precise estimate of the impact that this latest anti-inflationary package, the fourth of Jimmy Carrer's presidency, will have on the American economy,

Single digit forecast

All that Mr. Charles Schultze, chairman of the Council of Economic Advisers, would say over the weekend was that he now thought the long-awalted recession would be "smaller and later" - with the economy contracting in real terms from the fourth quarter of last year to the final quarter of this by about 0.5 per cent, not 1 per cent, and with Inflation being a percentage point or more lanche.
higher than it would otherwise By esbave been, at a little under 12 ing to Index. President Carter confidently predicted that by next year inflation could be down to Reserve Board, Mr. Paul Volcker, appeared scepticel about even this through the ago. perennial haze of bis clgar.

hardly surprising since the Administration and the Fed (it would be more accurate to put

HE new vogue word in psychological than practical Washington is "candid." warfare against inflation—
In foreign policy, it is and with limited tools. The candid for the President of the \$13-14bn in spending cuts next United States to admit a mis- year (In a \$600bn plus budget) take in voting against Israel in may hurt domestic constituenthe United Nations. In cies hut are far from swingeing economics, it is candid to Indeed the budget itself is being acknowledge publicly that the balanced as much by fiscal Federal Budget, with all its legerdemain through the raising legerdemain through the raising attendant economic projections of additional revenues as by deep which was promoted, with economies, though the symbolic such fanfare, at the end of significance of balancing the significance of balancing the budget should not be under-January as being "lean, tight budget should not be under-and austere" and appropriate estimated. Mandatory controls over wages and prices have been absolutely ruled out. And the economy itself still remains vulnerable to external inflationary shocks over which neither Mr. Carter nor Mr.

Volcker has great control. The most important thing to bear in mind about this latest package is that it was not induced simply because the Con-sumer Price Index suddenly took off in January and February at on in January and reordary at a nearly 20 per cent annual rate. December's OPEC price increases and high domestic interest rates made that, as Mr. hluntly pointed out, predictable.

U.S. business, in the midst of the second period of soaring Interest rates inside six months. is in a much more vulnerable condition than it was last October when the Federal Reserve launched its last antiinflation package,

When the Carter Administration framed its initial budget proposals in December, it was well aware that rising interest rates and oil prices threatened some acceleration in the rate inflation early this year.

What It did not, and according to Treasury Secretary Mr. William Miller, could not have anticipated was that the grim inflation news would trigger a drastic change in inflationary expectations in the financial markets, a change which is threatening permanto finance new aircraft which ently to alter their structure to cause long-term damage to the U.S. economy.

The most vivid illustration of this pessimism is seen in the long-term bond markets. A slide which began in the wake of the Federal Reserve Board's October 6 anti-Inflation package \$35bn to corporate borrowers, fook bond prices to historic The crisis in the bond mar lows towards the end of last kets is. however, merely year. But the New Year's Infla-symptomatic of a broader tion news triggered an ava malaise which has begun to

per cent on the Consumer Price Morgan Stanley, close to \$500bn term lenders." -around 20 per cent-had been property financing has ground wiped off long hond values to a halt on new office and since October. The number of shopping facilities. The housing the "high single digit level"— investment houses actively make market, too, even in California but the chairman of the Federal in markets in a full range of and Texas, is heading for what investment houses actively mak- market, too, even in California expectations. debt securities bad shrunk to some economists believe will be five or six from 40 to 50 a year its worst slump since World

The virtual collapse of the These qualifications are bond markets has forced some mortgage credit are raising the prime borrowers, particularly their interest rates to 16 and d (it utilities like the American 17 per cent in order to scare off put Telephone and Telegraph Com- new borrowers. Most of what the Central Bank first, since the pany (AT&T) to pare back funds they possess have been marginal reserve requirements main onus still rests with lt) capital spending budgets to the finding their way into New on managed liabilities at banks, are in fact engaging more in minimum in order to avoid lssu-York's money markets rather and the closing of big gaps such

ing securities at crippling than into bousing.

DOLLAR TRADE-WEIGHTED BIDEX

PRIME RATES

1976 1977 1978 1979 1980

oot interrupt normal opera capital investment and the tions," said Mr. William Cody, productivity of U.S. industry.

Assistant Treasurer.

For the weaker companies it For weaker companies, the problems are serious. Last week Containers, one of the world's largest ship and con-

leasing companies, tainer announced it would be selling a third of its ships because it cannot sustain its present level of operations with floating rate debt costing 20 per cent. Financially stretched capital-

Intensive Industries bave suffered most. Braniff Interna-tional, the fast grower of the airline industry in the past five years, la desperately putting together a financing package with insurance companies which is based upon the lenders taking options to convert their loans into Braniff stock at advantageous prices. Other alrines have been forced to borrow from banks at high rates are vitally needed in order to cut fuel coosumption and stay competitive. Anheuser Busch, the country's leading brewer, gone to the banks for m in long-term funds \$100m rather than the bond market.

which last year supplied over The crisis in the bond marspread through the financial

War II.

The iong-term suppliers of

In the longer-term the drying We have delayed or put off up of long-term finance clearly everything we can which does has disturbing implications for

is becoming a question of survival at these high interest rates, and the same can be said for some parts of the financial system—particularly savings banks and thrift institutions which have around 70 per cent of their bome. loans earning interest at under 10 per cent while new money is costing over 15 per cent.

But if Washington appears to be worried about the risks of over-kill it is equally worried about the danger of inflation reaching the point where it is running out of control. It is this threat, and the threat that double digit inflation could run on for the foreseeable future which Wall Street wanted to see tackled with a firm commitment and bold substantive decisions aimed at curbing Government spending, particularly in the area of transfer payments such as social security.

Self-inflicted discipline

ready seem to have decided that the fiscal package, whose con-tent was thoroughly leaked in By early this month, accord- system and which is being advance, does not meet these to investment bankers called "the revolt of the long- criteria or hold out much bope of them being met in the future. This in turn would seem to cast a shadow over hopes of any dramatic reversal of inflationary

The consumer credit element in the package is already being dismissed as tampering at the margins with a declining prob-

are being taken more seriously. The tightening up of the

as the banks' freedom to trans for example, the proposed with fer loans offshore, could start holding levy on dividend and to bite soon. This is one reason Interest why short-term interest rates are bardly popular. Anything which expected to continue their steep extends the powers of the expected to continue their steep ascent. .

There is also clearly going to be greater moral snasion on banks to curb their lending growth in line with the Fed's credit expansion targets In short, the Fed is sticking

with its gradualist monetary policy. Wall Street would like to believe that this approach, which has now taken interest rates in the money markets to levels which are beyond the ken of its economic models, will start to make an impact on inflation. But the events of the weekend bave not convinced business that either the President or the Congress can deliver their side of the package. This reservation is under-

standable. For one thing, President Carter does not exactly possess a record for constancy. For another, implementation of much of the fiscal side of bis package still resides with the Congress. The Administration claims that it has engaged in "unprecedented" consultation with Capitol Hill In framing its measures and that, therefore, chances of possage are good. Indeed, over the weekend, two Congressional budget leaders, Senator Muskle and Representative Glalmo, said

that, if anything, Congress was now, not all the pieces are in likely to make deeper cuts in place and such consensus as spending than those outlined by exists remains very fragile. the President. gored when the actual detalls of public at the end of this month will work to prevent their implethe cities and States has been negative. There has been intense debate inside Congress

in the past week over whether defence spending can fairly be

payments does) is federal bureaucracy, which is explicit in the Fed's expanded role. the beefing up of the Council on Wage and Price Stability, and the Department of Energy's role in levying the oil import fee, is certain to provoke hostility—and, indeed, frustra-tion, since Congress cannot, in

BUDGET

these areas, prevent the President from working his will. Energy policy

testing point

Mr. Carter, after all, is not

the only politician running for re-election this year and conessmen and senators do not like to distance themselves ton far from their constituents. A particular litmus test will be whether or not Congress will respond to the President's request for a motor fuels tax to succeed the new fee on im ported oil, the presidential authority for which expires in September next year. In spite of the overwhelming evidence that American dependence on imported oil is a prime ingredlent of domestic inflation, it has taken the legislature three

long years to disgorge a com-

prehensive energy policy. Even

But Congress rarely resolves candid when be sald that the things so easily. The powerful cure for inflation would be hoth interests whose oxen will be slow and painful His senior officials have been just as direct the expenditure cuts are made in warning that inflation is public at the end of this month likely to remain at or above existing levels for at least a mentation. Already public few more months. This, in itself, reaction from business, labour, constitutes a test for the nerve of the Administration and the Fed, for the financial markets and for the politicians, all of whom are now sailing in waters may be in Europe, are still exempted from budgetary may be in Europe, are still stringency. Anythlog which largely uncharted in the United amacks of increasing taxes (as. States.

Wall Street economists al-

lem. The consumer appears to be disclolining blusself. But the Fed's other measures

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MEN AND MATTERS Dog fight

over Dorset

head of the consortium trying to wrest MG sports cars from BL's grasp, running Aaton Martin and nursing his property development interests, Alan Curtis bas been badly shocked to discover that his personal business favourite, Air Comp-ton, is in danger of heing shot down, and his Compton Abbas airfield of being landscaped into obtivion. He telts me he has been

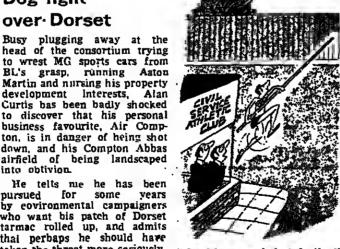
pursued for some years by eovironmental campaigners who want bis patch of Dorset tarmac rolled up, and admits that perbaps he should have taken the threat more seriously. "Good beavens, he's defecting!" He is doing just that now, bowever, since the local council has refused to allow blm to develop crop-spraying facilities and build a reception area, follow-

ing pressure from the lobbyists. While the conservationists have been sniping for years, Curtis says be is the man who has decided to bring matters to a head, and has scrambled to counter-attack, claiming support from locals, airborne businessmen who use his air taxi service or their own planes, crop sprayers and their farmer

cusiomers. With a couple of kills in the log, his opponents can feel justifiably couffed. In my book, Alrman Curtis, win or lose, richly deserves a sharp smack on the wrist for neglecting one of the prime rules of fighterplloting and allowing the green belt "bandits" to latch so firmly on to his tail.

Goodbye Vienna

The gold price may have come a cropper, but the cost of advice for steel-nerved bullion buyers is atill shooting up. Gold enthusiast Harry Schultz, who claims dublous fame as the world's most expensive invest-



ment pundit, tells me be bas been so snowed under with calls from frightened clients that he is thinking of putting up his consultation fee from \$2,000 to \$3.000 an hour.

of the Russian menace with unstinting support for the demand. "Passengers failing to sidering that a year ago the return of the gold atandard, bas produce their tickets," it consbares were worth only \$40. At for 17 years been carving a tinues in small print, "will be this price, the executors clearniche in the bearts and bank liable to pay the appropriate out would raise about \$380m. balances of his international fare." clientele with advice on beating inflation, the taxman and the lurking Communist threat.

His battered visage showing clear signs of the stresses imposed by his prophetic burdens, Schultz is now telling against panic and claims soothingly that it could be np to \$900 in time for Christmas. But the kill-joy instincts of newsletter contains, the denounced the claim as "dis-disturbing revelation that the graceful" and offensive." Russians, after mopping up the

whole of the Middle East, will that the rail authorities are be in Austria, North Italy and still set on running a test case part of Germany by 1982. through the courts, establishing He counsels wealthy Viennese foolhardy enough not to upsticks instantly to build a

second home and stateb a crock of gold in . South America. keeping on hand only enough small-change Krugerrands to buy a place in the airline queue on the day the tanks pile in.

Dodger deterrent Fare dodgers beware. Britisb

Rait, exasperated by its lack of success in reducing its annual

of getting its own back. Criminal prosecutions are expensive and bring in no money, so cheaper civil actions are being tried as

can force payment by applica-tion of paragraph 10 of its Con-Chelsea-based Schultz, an tion of paragraph 10 of its Con- By the time the bappy hour affably hawkish American woo ditions for Issue of Tickets, intervened the Getty Oil price combines lugubrious warnings which states that travellers must had slipped \$5 from \$82. But hand over their tickets on In its eagerness to prove the

legal worth of this condition, sad to say, BR fell flat on its face. It tackled a gentleman who could not produce his ticket at a London terminus. He had lost it, he said, after it had been his clients to be "psychologi-cally prepared" for the gold price to fall to \$435. For the action, however, BR stated that moment, however, he counsels it did not dispute that the luck less traveller had set off properly ticketed, bul still it sued away, citing condition 10. The corporate face, however, the professional seer are bard turned to condition red when to suppress. His February the County Court registrar Not to be deterred I hear

and, staging a deterrent onslaught on the free-loaders. Clearance sale

the rectitude of condition 10,

Paul Getty never seemed to

bave any trouble when he was alive, but his Los Angeles executors are apparently finding themselves increasingly embarrassed by the richness of his estate. What to do, for example, with the Ibn-odd sbares be owned in Getty Oil? loss of £12m to non-fare-paying As a first stage in what looks passengers, is delving into its like a complex game of pass legal ditty bag for new ways the parcel, the executors bave decided to sell off a large slice on the open market.

Accordingly, they have asked

Getty Oil to put together a a means of recouping the losses. secondary offering and sell next Passengers caught without month. About 5m shares are tickets, f am told, invariably expected to be on offer. Late claim to have lost them, and it last week, when the news came is difficult to prove that they out, Wall Street rang to the never bought them in the first cry of "sell" and the ensuing place. But now BR thinks it chaos forced suspension of deal-By the time the bappy hour intervened the Getty Oil price

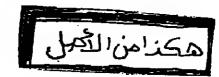
this is a mere bagatelle, con-

Word bas it that the funds will be bequeathed to one of Getty's memorials—the museum named after him at Malibu, California. But what can the curator do with such a sum? He already runs what must be one of the best-endowed collections in the world, and reputedly bas

Diet of worms "Landlord, there's a maggot

trouble spending bis reserves.

in this pie." "Come off it, that's fat."
"I know it's fat, it's eaten all the meat"



FINANCIAL TIMES SURVEY

Monday March 17 1980



Mrs. Gandhi: direction of economic policy has yet

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TRADE AND COMMERCE Suspense over economic policy

BY DAVID HOUSEGO

party rule that abruptly came to an end in January with Mrs. Gandhi's election victory now look like an interregnum in expandin India's post-war history. Until by 1976. 1977 Jawahralal Nehru and his The ex daughter ruled the country almost continuously since Independence. As a result of ber success in January Mrs. Gandhi and ber son, Sanjay, look like dominating India for the first five years of the 1980s and possibly for the whole

Mrs. Gandhi'a grip on the country is now stronger than her father's and indeed stronger than that she achieved during her previous 11 years as Prime Minister. By her massive eletoral victory she bas not only removed any Parliamentary opposition to her Congress Party but she bas effectively eliminated any challengers from within the party itself. Under federation of diverse interest.

Mrs. Gandhi has yet to set the direction of her economic policy. Since returning to preoccupations have heen with jobs and boosting demand in foreign policy in the light of an economy that during the invasion of Afghanistan and with reasserting her control over state governments which still remained in the

Nerhru's legacy was to pro-vide the country with a broad Industrial

THE THREE YEARS of Janata to undertake the major investments. Trade bad only a marginal role, accounting for only 8 per cent of GNP in 1965 and expanding to only 11 per cent

> had boosted the economies of the Far East—in South Korea trade accounted for 58 per cent of GNP in 1978—has been alien to the more lnwardlooking Indian tradition. It has been almost in spite of this that Indian engineering companies in recent years bave made substantial inroads in overseas markets, demonstrating their capacity to compete in quality

Emphasis

Nehru's emphasis on beavy dustry was most forcefully challenged during the three years of Janata rule and par-ticularly by Mr. Charan Singh, who took over as caretaker Prime Minister in mid-1979. The Janata party sought to give and and to amall-scale industry as a way of both increasing an economy that during the 1960s was plagued by under-utilisation of capacity.

Already, during the last year of Mrs. Gandhi's Emergency, there were signs of a shift in policy. The unacceptable price of excessive protection of domestic industry was increas-ingly recognised as being an base that had its roots in a inefficient and high-cost manu-policy of self-reliance, import facturing sector and an tural output. Industrial produc-substitution and the develop-ment of a large public sector unworkable battery of controls tion is stagnant as well, in spite and regulations. Her adminis- of a backlog of pent-up demand

tration appeared to be leaning resulting from the growth in the policy of import liberalisas such as the Middle East, towards a more open economy, previous years of agricultural tion which was initiated by the a more relaxed attitude towards incomes. But India's ability to Janata government. Its most creasing have failed to utilise increasing support for private

Spurring this change was in export earnings to meet the higher import bill that arose out of the 1973-74 OPEC price

emerged so far suggest that Mrs. Gandhi is picking up these threads. Both she, and more particularly her son, Sanjay, seem more warmly inclined to the private sector though in practice this could mean more privileges for enterprises rather than any real opening up of economy to greater

She seems likely to cut back on the higher level of government earmarked for agriculture and to give less priority to small scale and handicraft industries. But in the past she has shown little inclination for long term economic planning.

Gandhi appoint a number of her key economic ministers the delay reflecting her habit of postponing decisions to the last moment. In the case of the economy her immediate concerns are going to inflation accompanying it.

After a succession of good harvests, the drought last year

now seems to have growth bumped up against constraints familiar in that other large con-tinental and developing economy

Output is being held down mainly because of shortages of coal, electric power and rail transport—infrastructural bottlenecks that exacerbate each other, are bard to tackle over such large distances and touch every sector of industry. In turn, they have contributed to a level of wholesale prices in December that is 20 per cent up

The additional external factor in this rate of inflation that creates immense social strains in such a low income country is the jump in oil prices. This also has been the principle cause of the sbarp widening in the trade deficit for 1979-80 to about \$3bn.

Concern with these immediate problems risks deflecting Mrs Gandhi's government from what should be long-term policy goals. The coal and power industry, and the rail network both need better management and continuing bigh levels of investment. Exports as well as industrial output bave suffered from their poor performance. The danger is that investment programmes could he shelved as part of overall public expenditure cuts in an attempt to curb the budget deficit and

Janata government. Its most beneficial impact has been to provide a measure of competition to domestic industryparticularly to capital goods manufacturers—and alleviate products market. sbortages of raw materials and capital goods. A liberal import policy is in line with the more open economy for which some of Mrs. Gandhi'a advisers have

After her electoral victory in January

Mrs. Gandhi's main economic auxiety is to

bring down Iudia's rate of inflation. But her long-term goal should be to

open up an economy that for too long has been protected against competitive pressures

by expanding its overseas trade.

been pressing. It is also a touchstone of whether the Government will give its aupport to programmes enabling industry to modernise their equipment. Corporate profits have been buoyant lately and there are plenty of signs that the private sector would

meet past growth in demand. But a return to restrictionist import policies would have an adverse effect. It would also encourage protectionist pressures by the industrialised

like to increase investment to

Sharp rise

On the other side of the picture there are more signs of government support for a longterm programme of promoting exports Export performance this year has been ragged, with traditional Items in the first half of 1979-80 such as leather goods, marine products and jute recording a sharp rise in value

Engineering goods exports

fully the available quotas to the EEC. Overall, a continning Overall, a continuing hazard for Indian exporters is the threat of government re-straints in order to divert

A long-term trade policy would have to take account of both the need for continuity as well as the need for both Indian industry and manufacturing exporters to be more specialised in what they manufacture and to which markets.

Anxiety over the need to curb inflation also threatens to reinforce the controls that bave bedevilled Indian industry and which Mrs. Gandhi has the opportunity to reduce. The immediate pressure will be to continue with price controls. But through the licensing of new industries or expansion of existing ones, the rules about the size of industrial companies and the extent of foreign investment, successive governments have spun a cat's cradle of regulations which stifles regulations which stifles initiative in both the private and public sector.

A great many companies have demonstrated their potential to produce efficiently, earn foreign given the chance. A small number of state governments have also shown that they can achieve higher rates of econ-omic growin given less control from Delhi. It would be sad if to curb the budget deficit and hence the pace of inflation.

Concern over the trade balance also risks undermining to curb the pressures on Mrs. Gandhi effecting the problems of Indian to liberalise were checked by industry as well as lack of sustained effort in major markets over inflation.

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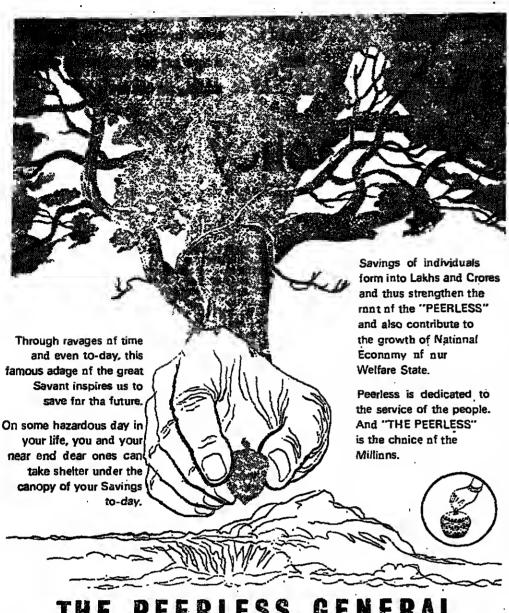
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Need for strong measures to halt the drift

SOON AFTER she came to for 1979-80, power in January, Mrs. Indira But the Gandhi spoke grimly about the burden of the appalling economic legacy she bad inherited from the Janata and Lok Dal Governments of the previous three years. In her first broad-cast the Prime Minister said that the "Janata Party has dissipated in just 30 months the solid economic, social and political infrastructure huilt by the Congress over 30 years."

ECONOMY

The charge bas obvious politi-cal undertones but Mrs. Gandhi was exaggerating only slightly. The eronomy has indeed run into a bad patch once again. The unusual spell of four

good monsoon years ended in 1979 when a severe drought hit most parts of the country and proved an immediate reminder of the economy's continued dependence on rain. It is now accepted that 1979-80 will be a year of "negative growth," and that Gross National Product will actually fall rompared with the previous year, reversing the trend of an average growth rate of around 4 per cent in the past

The decline, according to the National Council of Applied Economic Research, could be as Economic Research, could be as much as 4 per cent. Such a serious setback was last registered in 1972-73, when the economic growth slipped by 1.1 per cent, and is in sharp contrast to the (now redundant) sixth five year plan's postulated annual growth rate of 4.7 per cent. The stagnation is due to fall in agricultural production directly attributable to the drought-foodgrain ontput is expected to fall by about 8 per cent to about 116m tonnes—as well as the possible decline of industrial production, a rare hut unpleasant combination.

The crisis, for that is what it is is exacerbated by the fact that India has rapidly shed its reputation for being among the few countries to have contained inflation. Wholesale prices in 1979 rose by more than 20 per cent, causing social tensions that the Government is finding diffi-cult to handle. Part of the inflation was imported, of course, because of the high prices of crude oil which are largely res-ponsible for the record trade

But the inflation was, as economists acknowledge, also speedily due to mismanagement of the

demands. economy; this really means the absence of effective Government in the past three years. Dr. Raj Krishna, a member of the now dissolved Planning Commission, says that the current inflation is due to three ceuses; the high budgetary deficit, estimated by him to be roughly Rs 20bn in 1979-80, the rise in money supply by 18 per cent; and the sbortage of such essen-Rs 7bn. tial commodities as augar, edible oils and vegetabes as a result of mismanagement of supply

during the year. Other ominous signs on the borizon are the decline in the stocks of foodgrains, which had reached around 20m tonnes in the past three years and which will inevitably fall to keep the public distribution system going in a period of low production.

growing foreign exchange reserves are now past their peak and the current year will actually show a fall in contrast to the rise of Rs 17bn in 1977-78 and Rs 8bn in 1978-79. They are still impressive at around Rs 53bn but the burden of oil imports is finally beginning to tell despite the continued huoyancy of remittances from Indians abroad. These bave contributed about Rs 1.5bn monthly to the reserves for the past four years.

Cushions

India's

Tha food stocks and foreign exchange reserves were considered to be inflationary because of the increase in money supply and demand they provoked without a matching supply of goods. Yet they bave been taken to be safe cushions on which the Government could always fall. They continue to he so, and indeed many officials and economists feel they should have been run down a long time

But they are falling now not because they have been made nse of consciously as part of a deliberate economic plan but because of the drought and rising world prices. This under-scores the drift of the economy to which Mrs. Gandhi rightly to which Mrs. Gandhi rightly factors that have contributed to points and must give cause for a slump in industrial production can be accomplished by check-concern, especially now that the

little sign that it means to tackle the economic problems as the situation

Yet all is not unmitigated gloom. The current crisis comes against a background of a steady rise in national income in the 1970s despite three disastrous droughts, e costly war and a tenfold rise in crude oil import prices. A couple of years ago there was actually a trade surplus, albeit of a modest

India has built up a strong industrial base that enables it to compete successfully for turn-key projects abroad. In the countryside the area under irrigation is increasing et about 2.5m bectares, although the target of adding 17m by 1984 is unlikely to be achieved. New generating capacity reached a level of 3,000 MW last year. Even though

exchange reserves are declining, aid disbursement is higher than ever hefore and remittances from Indians abroad show no sign of slowing down. Mrs. Gandhi rightly complains of a had economic legacy but the Indian economy always slows down after a drought and it does show signs of basic does show signs of hasic resilience. Another drought would be disastrous but the basic ingredients of being able to tackle a critical situation are present and, given the political will, the economy could resume its upward trend.

It must also be said to the credit of the Janata Government that it initiated schemes of development that strike at the root of unemployment, India's basic and chronic problem. There are now in operation such schemes as "Food for Work," an integrated rural development programme and "Antyodaya," which bave the potential of catering for the needs of the heavily unemployed and underemployed people in the villages. So far, however, the problem remains despite the claim that the new programmes absorb about 5m out of the 6.5m people who join the labour force every year. Unemployment is now estimated at 25m.

cannot Unemployment diminished until the various forces.

Government bas shown brought into the open the pro- (estimated at Rs. 135m in sign that it means to tackle gressive weakening of the 1979-80 but is certain to be economic infrastructure.

Today the country faces a triple constraint on growth. Thermal power stations set up in the past two decades have failed to work at more than 45 to 50 per cent of capacity in the past decade. The railways are no longer able to meet the growing needs of an increasingly interdependent economy. The coal industry has failed to increase the supply of this vital

energy source. All these infrastructure industries are in the public sector, whose malaise is evident despite the overall profit Government units bava shown profits which are expected, bowever, to show a sharp fall in 1979-80.

There is debate over the level of investment that should be maintained. Unfortunately, because of the Government's preoccupation with politics, the de-hate will not lead to speedy decisions since the jettisoned sixth five-year plan of the Jansta government will take at least e year to replace. The plan, now obsolete in any case because of continuing inflation, envisaged a total public sector investment in the five-year period ending 1983 of Rs 710,000bn.

To end the infrastructure crisis, says Dr. Raj Krishna, such investments are essential and any cuts would be "tragic."
The plan, he says, "provides for necessary minimum infrastructure investment in crude oil, railways, shipping, aviation, steel, coal, power, etc. . . Any reduction in this investment would only aggravate shortages of these vital inputs a few years from now. Therefore it would be folly to cut this minimum

The savings rate in India bas already exceeded 20 per cent and investment bas fallen behind slightly. The problem of increasing investments in the public sector-and this heavily influences investment and growth in the private sector comes up against the undoubted need to check inflationary

Some economists feel that this.

much higher). This is not impossible since there is substantial scope for economy in areas like defence expenditure and subsidies to fertilisers and exports. The functioning of pub-lic sector-enterprises can be improved so that their losses are reduced. Prohibition, the introduction of which by Mr. Morari Desai bas led to heavy revenue

losses, can surely he shed. The Government bas announ ced that it will give priority to anti-inflationary measures but its only economic pro-nouncements are that it will revive the ambiguous end politically inspired twenty-point programme that Mrs. Gamini introduced during ber emergency rule. Fortunately, a Cabinet committee has been formed to table specifically the formed to tackle specifically the infrastructural bottlenecks. The Prime Minister bas also announced that on the industrial front efforts will be made to increase production as soon as possible through better utilisation of existing capacity, improvement of the poor labour relations that bave beld back production in all sectors and better management especially of public sector

nedertakings. So far these are just statements of intent. Things will not be easy for the Government. The current economic scene is replete with contradictions vast but unutilised resources. skilled but inemployed workers, sonhisticated machinery not made fully productive and domestic investment lagging behind domestic savings.

The Government's difficulties are increased by the realisa-tion that the India of the 1980s is not the India of the 1950s. Expectations are bigher. The people want more clothing. better housing, a more varied diet. efficient public services and generally a better life. With the country's considerable assets in the form of land, industry and manpower, these are not beyond reach. But it needs boldness and corrage on the part of the government as means to give priority to econo-mic policy and development rather than the lip service that baa been evident so far.

K. K. Sharma

Industrial strife gives way to peace

INDIRA GANDHI'S election victory coincided with a startling slump in industrial strife - perbaps no surprise in view of her stern handling of labour disputes during the emergency period.

But few industrialists are yet confident that a path of indus-trial tranquility lies ahead, if only because they heve just emerged from one of the most turbulent years on record.

More than 40m man-days were lost in 1979 as e result of strikes, lock outs or other disputes. This contrasts with 12.5m days lost in 1976 (during the Emer geocy) and is on a par with 1974, which was India's worstever year for Industrial strife: 40.2m man-days were lost.

In her inaugural speech after the January elections Mrs. Gandhi claimed that half of India's installed industrial capacity had stood idle in 1979. Industrial output was the victim of more strikes and lock outs. Management complained

still more damage was inflicted through go-slows, work-to-rules. "gheraos" or lock-ins, malingering, clock-watching or petty sabotage. The year 1979 offers a litany

of costly and often pointless strikes across the whole range of Indian industry. Bank workers at Grindleys struck for 92 days, insisting that their minimum bonus be raised from 8.3 per cent and that there must he a veto on mechanisation which cost jobs. They returned to work without achieving either of their objectives.

Other banks nationwide were affected by strikes for about 200 days, and cheques vere cleared on just 150 days.

Capitulated

Workers at Motor Industries Company (MICO) in Bangalore went on strike after management sacked or suspended abount 40 men. When the company capitulated 85 days later, it had lost an estimated Rs 180m in ontput, while the workers had lost Fs 20m in

Dhanbad in Bihar's Bbarat coalfield, miners went on strike three days before the "Holi" festival hecause they payment two weeks wanted ahead of schedule: they wanted extra spending money to fuel The managefestivities. to mobilise at such short notice, helpless. Three days' sbort notice,

At the Moonidih coal mine

production were lost. At Calcutta port, strikes or other disputes brought activity to a halt for 150 days, and production was effected on another 70 days. Exports worth millions of rupees were beld up, at one stage for three

months Labour conflict often bad very little to do with demands for better wages or for improved working ronditions. They were often associated with India's idiosyncratic trade union structure, which is closely linked

to national party politics. Irrational

With rapidly rising population, the fear of increasing jobless ness is acute and bas resulted in strong and sometimes irrational bostility towards any capital-intensive technologies. At the same time, manegement some sectors is clamouring for higher productivity, so the two sides find themselves on a collision course

Industrial stagnation, often the direct result of power cuts and the sbortage of essential inputs like coal, has made lay-offs and retrenchment endemic in some parts of the country. This inevitably proves demoralising for workers, who feel themselves under constant threat, and bas soured industrial relations.

In some respects, India still bas a pre-industrial labour force. Out of a total workforce estimated at 180m just 21m work in the "organised" industrial sector. There is a great rift between these workers, and those working in agriculture or in the "unorganised" sector—factories not regulated by law, usually employing fewer than ten peopla.

steel and power workers and similar workers in the organised sector can expect income of at least Rs 700 a month. This may seem small enough, but the average for the economy as a whole is fust Rs 5 a day - about Rs 100 a month.

An attempt a year ago set Rs 4 a day as a minimum wage was rejected as impractical. At the same time, proposals to set a minimum working age of 15 years as an attempt to end the exploitation of child labour was abandoned. An estimeted 16.5m children aged between four and 15 are working in the industry's unorganised sector.

foreign One economist claimed: reach the point where it has

real industrial labour force one that is reconciled to turning up for work at the same time. days a week, and working for eight hours. The whole notion of a stable

industrial labour force is some-

formed only since Independence in many parts of the country." This to some extent explains the "gundaism," or gaugsterism that is rife in certain areas particularly in the tribal areas of the Bihar coalfields. It explains too the sabotage to machinery which often accom-

panies strike action. It also in part explains widespread absenteeism. Mr. Krishna Ramachandra Kulkarni, leader of the main union at Bombay port, admits that absenteeism averages 20 per cent and rises to 30 per cent in April. May and June—the peak period for planting crops in the villages.

in the coalfields of Bihar and West Bengal. Cec! India estimates that almost 5m tonnes of coal output was lost between April 1979 and January 1980 as a-result of absentedism. If a worker asks for leave to vittend a family wedding, or funeral, or to look after an alling relative. thing which bas bad to be the request is never rejected.

During the past year of political upheaval in Delni. rivalries " wreaked havoe in some industries. In West Bengal, for example, where a Marxist government is in power, the unious aligned to the Com-munist Party-Market (CPM) grouped under the Centre for Indian Trade Unious (CITU) have held greatest sway. But once it became clear that

Mrs. Indira Gaedhi's Congress Parly was in the ascendent, so the union aligned to her party lanting crops in the villages. (mainly the Indian National A similar pattern is reported Trade Union Congress—INTUC: CONTINUED ON NEXT PAGE

Calcutta is UBI city

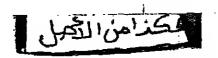
Calcutta ... a city of conflicting images and changing moods. It arouses intense feelings-favourable and otherwise. Regarded as the cultural capital of India, Calcutta is throbbing with intellectual elan. The city is also the gateway to trade, commerce and industry in Eastern India. Calcutta is also known as the UBI city. United Bank of India

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Dissident States pose unruly challenge

THE RESULTS of the January parliamentary elections were aa unequivocal as in 1977, so Mrs. Indira Gandhi should reasonably sure of an unchallenged innings for at least the next five years.

Since she has a comfortable two-thirds majority in the Lok Sahha (lower house of parliament), the people should also reasonably expect stable and consistent policies from the Government for the next few years because electoral compul-sions to cater to the electorate should not arise for some time. Yet there is uncertainty ahout

It is early to judge Mrs. Gandhi yet. Her preoccupations so far have heen either political or with foreign policy. This is because of the situation in the country, where ahe found a majority of the 22 States arrayed against her, and that on her horders hecause of Afghani-

Her preoccupations led to an unceremonious hundling out of power of the parties that controlled nine non-Congress States and elections to these are to he held in June. For this reason, Mrs. Gandbi'a first Budget haa also been postponed. For some time, therefore, the country will not know what the long-term (or, for that matter, the short-term) policies of the Govero-

Legacy

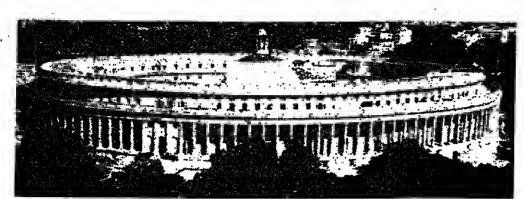
This must give cause for con-cern. Mrs. Gandhi, in the past, has acted when she feels her own position is in peril. There is no immediate danger to her and so she does not despite her constant criticism of her predecessors for leaving her an undouhted had economic legacy, feel the need to take action quickly to tackle the critical economic situation in the

It is unlikely that any major decision will he taken until Mrs. Gandhi is sure that the States
—nine of the major ones of which have no Government of their own—are behind her. This will be in June and so Mrs. Gandbi will have let six valuable months slip by.

Yet one must not he too hatsh, for politics has its own composions. Since India has opted for a federal Government and Mrs. Gandhl insists that the central administration must he strong, she must he ln a positioo carried out. With a majority of the States opposed to her, she would have found it difficult central government's writ.

In fact, in dismissing the non-Congress States, Mrs. Gaodhi did no more than the Janata Government in 1977. The nine States placed under President's Rule last month (February) are not the same as those dismissed by Mr. Morarji Desal in 1977. They include Tamilnadu in the south, whereas in the past action was taken only in the

They do not include West



The Federal Parliament building in New Delhi

tempted to use the hatchet halt normal governmental pro-

hy her opposeds, both the justi-fication for Mrs. Gandhi's step and its legality cannot be challeoged. In any case, few tears need be shed aince the State Governments in power for the past three years were as inactive as that at the centre especially in the key States of Uttar Pradesh and Bihar. The precedent has now heeo established that the results of Parliamentary elections, if they are as sweeping as In 1977 and are as sweeping as In 1977 and 1980, must supersede the earlier judgment of the electorate in the States if this proves to he different.

Both Mrs. Gandhi and her father rarely hesitated to remove - recalcitrant chief Ministers, even when they he-longed to their own party. The constitutional provision for dis-missal of State Governments and Imposition of President's Rule (which means, in effect, direct rule from New Delhi) has been resorted to frequently.

It went luto aheyance during It went into aneyance during the three-year spell that Mrs. Gandhi was out of power since Mr. Desai and Janata helieved that the States should have more freedom to go their several ways. The experiment was not entirely successful since the federal structure came under such severe strain it under such severe strain it seemed that dormant teodencies for secession would become active (particularly in the north-east where they are again active in Assem)

in Assam). The States, moreover, made such demands for autonomy, particularly for financial autonomy, that even Mr. Desai felt compelled to call them sharply to order. He refused to accede to their demands for more resources and powers other than those granted under the Constitution or hy atatutory hodies (such as the quinquennial Finance Commission) appointed noder its provisions.

The demands were such that they all hut paralysed the planning machinery; the States refused to coosider the draft of tha Sixth Five-Year Plao formulated by the Planning Commission until their demands were considered. Such was their insistence, that the Plan has never heen approved.

The lesson to ha drawn is that the Indian federal model does not really function if there Bengal where the Marxists have demonstrated their invincibility even though Mrs. Gandhi, like and willing to challenge the last year showed. But the

Mr. Desai, must have been central government. This can cesses even if there are only one or two such States Indeed Mr. Desai was stalled really by the (Sikh) Akali party in Punjab and the Marxists in West Bengal, the two States that were to the fore in the demand for more autonomy, even though thay were the Janata's allies.

Will the States allow Mrs. Gandhi to enforce the supremacy of the central government? By dismissing the nine noo-Congress Governments in the States Mrs, Gandhi has indicated her determination to ensure this, even though there is oo guarantee that the elec-torate will vote the Congress Party in when elections are held in June (State elections need not necessarily follow the pattero of parliamentary elections, especially when un-expectedly for Mrs. Gandhi, the

as aix months), If the Congress Party does not win in even one or two States, Mrs. Gandhl is in for Party of trouble. Taken with the hroader Marxists who have oot heen classes. touched in West Bengal and Since Tripura, even one or two addi-tional obstreperous States could put reins on Mrs. Gandhi.

intervening period is as much

Resolved

This is unlikely to be conceotrated, as it was during Mr. Desai's teoure as Prime Minister, oo demands for more fiscal autonomy although the Marxists can he expected to keep up the chaot on this. This question was resolved towards the end of Mr. Desai's Prime Ministership when he came down firstly and when he came down firmly and asserted the supremacy of the Centre. But over the years there have developed many other interests and groups articulatthe Indiao system:

A major example, and one that covers the country, is the stirriog in the villages and among the country's millions of poor farmers who want to assert their rights. Politicians find

which the Ceotral Government cannot but have a keen interest. Discipline among the administration personnel and the police has been seriously eroded in the

ried out peacefully and shows that the structure is hasically

Mrs. Gandhi has announced that law and order are high oo her list of priorities, even more than getting the economy going again. This is undoubtedly hecause ahe is aware that pro-gresa in the first has a hearing on the other. Indeed, for hoth ahe needs the co-operation of

Spectrum Another development is the consolidation of castea and com-munities, particularly in tha Hindi-speaking States, although the Parliamentary elections re-sults ahowed this has not taken lectuals thought it had. Yet it is also true that parties like the Lok Dal, led by the "Jat" (farmer) leader, Mr. Charan Singh, is closely identified with hackward classes, while the hulk of what remains of the Janata Party draws its support from a hroader spectrum of castes and

Since these are forces not quite as strong as thought prior to the Parliamentary elections, they can he checked if Mrs. Gandhi takes note of the reasons for the development of the pressure groups. If the coming State elections show that the Lok Dal and the Janata are not spent forces, she will need to act quickly, especially if they win large blocs of seats

in the legislatures. However, It is now evident that the ruling parties in the States cannot make extravagant demands on the central government in the manner they have in the past without frustrating their purpose or coming into collision with it. In fact, Mrs. Gandhi's reputation for seeking to act firmly on behalf of the hahly itself have a deterrent effect.

This may happen even io West Bengal where the Marxists mem ready-made material for Gandhi is just waiting for an excuse to oust them, so they excuse to oust them, so they have to enforce discipline among their workers to avoid a subject allotted to the States giving provocation to her. It by the Constitution hut one in which the Ceotral Government Prime Minister will control other manifestations of parochialism; there is little doubt that she needs to tread carefully if the federal structure is not to be excessively strained.

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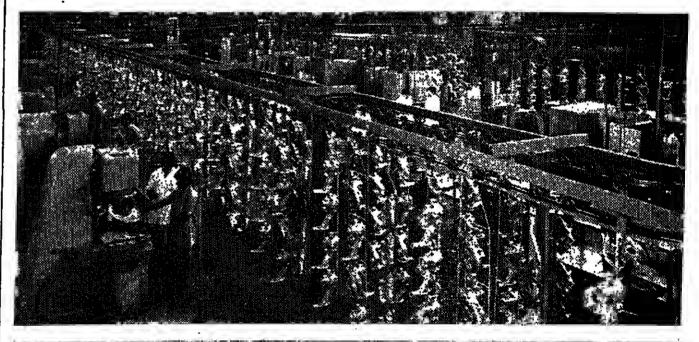
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CONTINUED FROM PREVIOUS PAGE

began to foment trouble. They could be confident of support from Congress politicians, just as CITU uniona could depend on the CPM.

Across the country, similar power play was rampant, and as these uniona vied for support. so industry was the ultimate casualty. With Mrs. Gandhi now firmly

ensconced in Delhi, one would expect this rivalry to subside: the structure of patronage has bean fixed. Only in areas like West Bengal and Kerala, where the Communist parties have kept control of federal seats at the same time as running state Government, can conflict he expected to continue unchecked. Even trade union leaders

despair at the consequences of such confilet. Mr. Kulkarni, who leads the predominant Hind Mazdoor Sabha (HMS) union in Bombay port complained: "Many strikes take place only because of undue interference hy the Government or opposition parties, every political party tries to control labour, often with chaotic consequences.

"I believe that labour ahould create its own lohhy. Workers among themselves, so industry sheuld be given the right to is paralysed." elect leaders through secret ballet, and whichever union gains a majority vote should be regarded as the sole hargaining agent for the whole work force."

Mr. Suhrata Ray, director of planning and research at Bom-bay port, confessed: "We are singularly lucky in not having a broad multiplicity of unions

Calcutta port does not share luck. Inter-union rivalry is in large part respon-

Federation of Indian Chambers lying idle for three years—even higher output.



An attempt to end the exploitation of child labour has been abandoned. Here, villagers attend a local

against the other. As they war

A similarly severe problem is A similarly severe problem is resistance to mechanisation. Mr. to very low productivity at a Monoranjan Roy, leader of the time when most industrialists Communist Centre of Indian Trade Unions (CITU) in Calductivity cutta, complained: "Here in survive."
West Bengal, the main problem The m is shortage of employment-of unemployment and retrenchment, of setting up machinery. reducing the employment potential of industry as a whole."

This fear of unemploymentin West Bengal an estimated 6m sible for the port's appalling -10 per cent of the population, work record last year. While are without work of any kind— the next five years, but to do days, Bomhay lost 44.600.

a fertiliser dock with four doubling or trehling of producdays, Bomhay lost 44,000. a fertiliser dock with four doubling or trehling of produc-Mr. D. H. Pai Panandiker, high-capacity 13 tonne cranes tivity. We are prepared to pay deputy accretary-general of the worth a total Rs 11m has been well, but only in return for

pillar mines. It explains why meot will be under pressure to hank cheques and most Government of the pressure to the pillar mines. It explains why meot will be under pressure to hank cheques and most Government of the pillar mines. ment statistics are still dealt with by hand.

realise they must improve productivity simply in order to The managing director of a

major international electrical makes the most of her post-company with its headquartera electoral honeymoon, so workers in Calcutta explained: "Our are no doubt thinking back to lahour relations problems are peculiar in that they are concentrated completely on Improving productivity.

"We aim to double output in

"We simply have to convince workera that it's in their own interests to adopt more sophis ticated technologies."

Workers point out that the companies' plans involve peg-ging the work-force at the pre-sent level of 4.000. With more people coming onto the joh market every year, they are wornied how their children will find johs if such growth policies

An industrial relations Bill was drawn up by the now ousted Janata government. Opposed by employers and workers alike, the But a new policy is urgently needed. The new Congress government is drawing up plans.

In the meanwhile, the industrial atmosphere has improved since the agreement in Novemof Commerce and Industry though the port is hopelessly demands as such that are a problem for industrialists. You find that in every industry you have so many unions, each competing

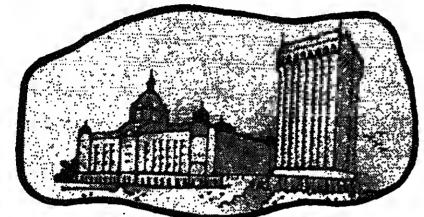
alisation of union structures, to devise labour courts or trihunals for arhitration purposes, to curb violence and sahotage in strikes and to establish a wages policy, possibly involving index-linked wage deals.

But for the moment, industrial peace prevails. As Mrs. Gandhi what the CITU leader Mr. Monoranjan Roy called the "semi-fascist terror" of the 1975-77 Emergency period. they pause for thought-and for hreath—at the end of a year of terrible conflict, the new Congress government must dearly hope that the peace will last.

David Dodwell

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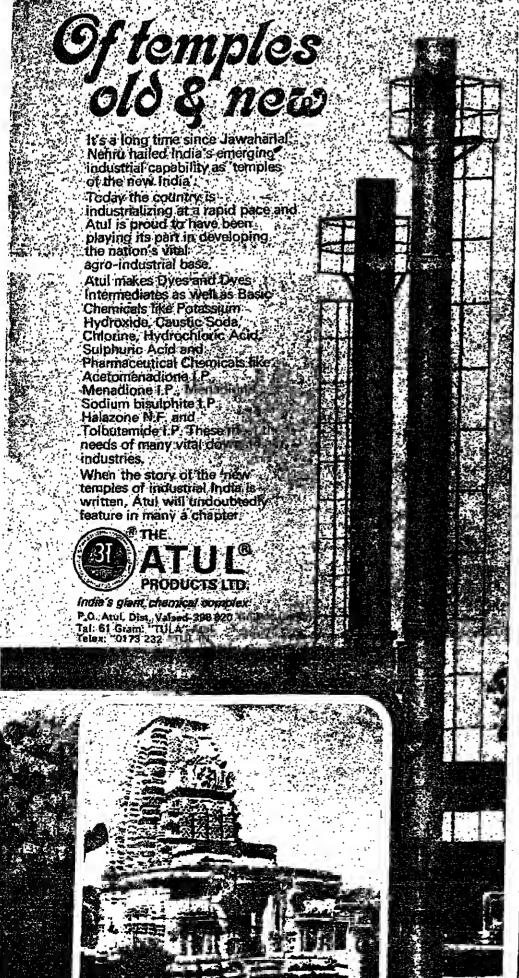
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Alarm bells as deficit gets bigger and bigger

PAKISTAN

INDIA'S FOREIGN trade deficit tion in industrial output it is in the current financial year unlikely that the country will ending this month will be the be able even to maintain the out of different hats in New Delbi.

abroad and aid, and that India at ports.

prospects are even gloomier. Mr. Pranah Kumar Mukherjee, the Commarce Minister, said recently that be feared "the Economic Research estimates the same sort of figure, but the Indian Chamber of Commerce (\$3.75bn). Foreign economists estimate a deficit this year of about \$3bn, rising to \$4bn in

In the January issue of its quarterly journal the National Council of Applied Economic Research gave the following reasons for the growing trade deficit: "Increasing import price of petroleum crude, liberalised import policy pursued by the Government since 1977, inadequate increase in domestic crude production, pro-tectionist policy of developed countries, and inadequate growth in India's industrial output and, thus, exportable

favoured in Government offices in New Delhi-in effect a mix-ture of unfavourable external circumstances like higher oil prices and protection in the multinationals or large changes West along with political tur- in industrial licensing policy. moil at home setting up an

unfavourable chain reaction.

The last point is taken up with vehemence by Indian industrialists and businessmen from Calcutta to Faridabad and from Ludblana to Bombay and Poona. "How cao we export," they exclaim, "when we are denied power, when our goods move slowly from the factory to the docks, and are then delayed at the port by industrial unrest?"

Comical

Stories which would

pletely," said one company director; the big industrial group waiting for imports and finding that the ship had docked and then gone away again because of the slow unloading, and when the cargo did land a special "levy of Rs 200 a wagon had to be paid to persuade the

railway workers to send the goods out of the port area." To such husinessmen there is simple prescription and Mrs. Indita Gandhi is good news because she will supply it: "Dis-cipline and let us get people working." One senior director even suggested: "A couple of battalions of the border security force will set things right. Possibly a few people might get shot, but discipling has to be higher export earnings. restored. Let the power flow, But what to do with the l let the coal move, let industry

Other economic analysts able to take a more detached view than husinessmen who have to bear the brunt of delays and inefficiencies suggest that a much wider action programme

The National Council recomforeign exchange remittances from abroad,"

heaviest ever; next year's will moderate 4.8 per cent rate of be even worse. Exectly how export growth achieved in big the deficits will be is still a April - October 1979. Efforts matter for speculation, with to step up exports require not different figures being pulled only an overall improvement in industrial output but also the Delbi. capturing of new world markets.

But certainly the alarm bells special incentives in the form are rioging because it seems of raw material and import likely that this year's deficit will entitlement quotes and minimi not be covered by earnings from sation of export delays as a remittances from result of congestion and strikes

All of this is easier said than will have to draw on its foreign All of this is easier said than exchange reserves. Next year's done. Exactly how the new Government will deal with the As to the 1979-80 trade deficit. problem is not quite clear; poli-ir Pransh Kumar Mukherjee, tical problems are still preoccupying Mrs. Gandhi as she recently that be feared "the tries to bring the State Govern-figure may cross Rs 20bn ments under ber control. More (\$2.5bo) by the end of the present fiscal year." The National Council of Applied Still has not appointed a full still has not appointed a full economic ministerial team, Mr. Ramaswamy Venkataraman holds the portfolio of industries goes as high as Rs 30bn as well as that of finance: the (\$3.75bn). Foreign economists Commerce Minister is also in charge of Steel and Mines, giving them both onerous loads.

Sharper

The indications are that there will be no radical break with the past, but there will be an attempt to curb imports and promote exports within a sharper management frame-

Mr. Mukherjee said recently that India's import policy might be changed. It could not remain liberal, be said, "to the extent of unnecessarily whittling down our foreign reserves. Nor can urplus."

we give a low priority to exSuch is also the explanation ports, the growth rate of which reached a nadir during the Janata rule." But be turned down any sweeping changes such as greater involvement of in industrial licensing policy.

The pragmatic approach to trade certainly seems to ba the one recommended by Indian Commerce Ministry officials. It worked before and probably fits in with Mrs. Gandhi's style of operation. Crisis committees can sit, with representatives from each Ministry, and decide which exports should be cocouraged—backed if necessary by a battery of incentives—and which imports should be curbed and which allowed.

There is scope for such a technique. Last time sugar and he silver helped to close the trade y not gap. Today vigorous export of a sad indication of India in 1980 those particular commodities abound — power stations carting coal a thousand miles across the country by lorry, as and be chosen Export of the result of the country by lorry, as and be chosen Export of the unit was placed on hessian exports. This policy has encouraged producers to rely on the safer and the country by lorry, as and be chosen Export of the unit was placed on hessian exports. them for oil seed, could make a few hundred million ruspees from the international cocktail market of power and shipping s space to engineering exports should help them literation. year. Such exports have been especially hadly bit by the present crisis and are likely to fall below last year's figure of

> On the import side there is also room for improvement. Large imports of edible oils, costing about Rs Sbn to Rs Sbn could almost certainly he reduced, as could imports of fertilisers, aluminium, steel and cement. These items account for 20 per cent of the growth in dollar terms of imports. In addi-tion, careful spotting and selec-tion of export markets would lead to continuous liberalisation of imports of goods—inputs for synthetic textiles would be one

But what to do with the larproduce, let the railways work and the ports run smoothly and we can get the country on the 1972 to Rs 30bn in the current year, which is between 45 and 50 per cent of export earnings. Next year oil will cost about Rs 45bn assuming no further increase in price and that demand for oil will increase by 10 per cent. The country has increased its own oil production and is intensifying efforts to mands the following measures: find domestic sources. Imports "Maximisation of exports, selected ay are 60 per coot of India's

CALCUTTA!

of which domestic production would be about 24m, the Government faces a dilemma, If in terms of the last quarter of the 20th-century today is an some other pertinent comments era of cheap oil, it may be better to conserve as much as on the value of trade. Countries, it said, which bad "used foreign trada opportunities to possible of domestic supplies for the day of expensive oil. capitalise on natural advan-

Uncertainty about oil and the size of the deficit it might fuel has led some economists to urge a departure from India's traditional limited idea of seeing exports as a means of paying for imports or as a temporary vent for excess production. Instead, such commentators urge, exports should be a target and a means of stimulating economic growth. They should even be made profitable. The tendency has been for the government to step in and impose additional duties when it looks as it as experter might looks as if an exporter might make a windfall profit; this hap-pened at the end of February when a duty of Rs 1,000 a tonne

Toning up Industry and im-proving efficiency are reasons why the World Bank is hacking the idea of export-led growth for India. In its world development report 1979 the Bank bad some specific remarks about the dangers of import substitution imposing high costs on overall economic development: "Even in larger economies such as Brazil (at least until 1965). India. Mexico and Turkey, the prolonged use of protective mea-sures bas contributed to the development of high-cost inefficient industries. Moreover, an important corollary of the protection afforded to manufacturing is its disincentive effect on agricultural production. Import substitution policies have tended to limit agricultural growth, and hence domestic demand for manufactured goods, while simultaneously keeping industrial production dependent on internal purchasing power."

Perspective

This is the problem—that a switch to a regime dedicated to open trade would fly in the face of the policies of 30 years, and not just trada but industry and the whole economy. The pers-pective in New Delhi still seems to be inward-looking and indeed remarkably lacking in self-confidence for such a big country and one which sees itself as a leader of the developing world and an industrially sophisticated Officials, experts and business

men alike stress the dangers of trade in a climate of growing protectionism. This is despite evidence collected by the World tive approach to imports, intensified search for new indigenous sources of fossil fuels, increase in domestic production of edible oils, and measures to attract percent of the control of oreign exchange remittances year, compared to 12m last, advertisement than India's rom abroad." But with oil needs for the year \$450m. Though India moans 1t warns: "With the stagna- 2000 estimated at 69m tonnes, about the closing of markets to

it, the reply of the EEC is that can you be surprised that our in most areas India has not fulfilled its quotas. The World Bank report had

tages, such as their location and plentiful supplies of cheap labour, or on acquired advan-tages such as skills and tecbcapabilities, developed more quickly and avoided cyclical foreign exchange crises more easily than similarly endowed countries that have excluded foreign competition and protected domestic production heyond the initial creation of an industrial

But in New Delhi the senior officials and the businessmen continue to talk of India as the continental ecocomy. So

exports are only seven per cent of GNP, the same proportion as in the U.S." Another favourite expression is: "We have this yast home market to satisfy first."

This really is an Alice in Wonderland world—when per capita income is still about \$150; when growth this year will he negative, wheo power and production is constantly disrupted; when of the annual addition to the labour force of 5.5m only 550,000, or 10 per cent, gain employment in the organised sector (including mines, maoufacturing, utilities, public services and major trade and transport organisations); when 48 per cent of the rural people and 41 per cent of the urban dwellers — 290m Indians
—live below the poverty line.

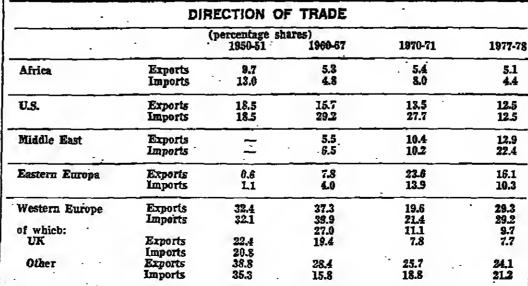
Kevin Rafferty

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State Bank of India with its global network spanning all time zones offers a comprahansiva range of international banking sarvicas covering project loans, financing of joint vantures, participation in syndicated Eurocurrency loans and a package for international trade financing. Stata Bank has acted as Lead Manager and Co-Menager in Eurodollar loans for both domestic and international vanturas. State Bank was Co-Managar for two 50 million Euro-dollar loans for the Oil and Natural Gas Commission of india and Air-India and three Euro-dollar loans aggregating U.S. \$ 400 million for customara in Dubai and Nigeria. State Bank also co-lead managad a 50 million Eurodollar loan for Government of Mauritius.

State Bank



A FEW years back, India's not competitive on the basis of Though he later points out the anxiety of the Government Indian goods is good to very engineering exports to Rs 100hn played by profitability, un-import bank is set up to take exports were booming, rising by imported material."

Though he later points out the anxiety of the Government Indian goods is good to very engineering exports to Rs 100hn played by profitability, un-import bank is set up to take potential losses to the economy quickly to cream off anything good, but their promotion is by 1990, a ten-fold increase in interrupted and adequate cash care of finances needed for the control of the con 25 to 30 per cent a year, and the pundits freely forecast that the country was discovering "an problems of labour, erratic exports are as high as 6.22 per export culture" with daily sales rail and shipping movement, but cent of GNP in 1977 as It might export culture" with daily sales successes, especially in the growing Middle Eastern market. with orders won in the face of fierce competition from the West. With exports rising from 4 pec cent of GNP to almost 7 per cent, the hopes accmed

reasonable.

But today they look sick. Not only is India facing its higgest evec trade deficit, but export growth has slumped. Two years ago export growth was small about 5 per cent, a year ago it was smaller, less than 4 per cent, and in the current year ending this month it may be same as last year or just possibly negative. In terms of earnings, exports shot up from less than Rs 20hn 1£1.09bn) in 1972/73 to more than Rs 51bn in 1976/77. In 1978/79 earnings were Rs 56.2hn. In the first half of this year the growth rate was 4.8 per cent, but in view of the stagnation of industrial output it is unlikely that even such a modest rate can he maintained, so exports may he less than Rs 59bn.

Of course there are particular difficulties this year. Time after time, husinesamen and exporters bave complained about breakdowns in the whole infrastructure from power supplies to shipping space. It is instructive to quote from a plaintive paper prepared by the Engineering Export Promotion Council last month for Mr. Pranab Kumar Mukerjee, the Commerce Mini-ster. In recent years, engineering exports have been the star performers in India'a trade, rising from about Rs 1hn in 1969/70 to Rs 7bn last year and with high hopes of exports of Rs 10hn next year and Rs 100hn in 10 years' time.

Framework

But this year, says the council, the epgineering industry as a whole, and the exporting sector in particular, has greatly suffered during the past 12 to 15 months from the complete system. As a consequence, the basic inputs and infrastructural the "geographical concentration facilities like steel, pig iron, index," reflecting the areas to facilities like steel, pig Iron, coal/coke, power, diesel, railway and road transport and shipping, so essential for engineering exports, were not available. Import of basic raw materials was permitted, "but" available. Import of hasic raw Ministry adviser is keen to materials was permitted, "but" stress India's "self reliance" the connoil said, "export was and "lack of dependence."

also a failure of policy. At a be and that this implies time when the trade deficit was dependence. He says this dised. when the Commerce Ministry was keen to push exports, the Industries Ministry stepped in and hanned certain There is plenty of scope for categories.

Consideration of the policy framework is essential as it is clear that India'a carefully checked and balanced system of licensing restrictions bas prevented and continues to prevent the emergence of a fullblooded export regime.

Within its own limits, the policy has had successes. As Mr. Vijay Kelkar, adviser to the Commerce Ministry, pointed out in a thoughtful paper early thia year, both the range and 1.45. quality of Indian exports have vastly improved. At the time of independence, the U.S. and the UK hetween them took more than 45 per cent of India'a exports which consisted largely of agricultural products, crude materials and simple manufactures like jute goods and cotton textiles. In 1951-52, exports of iron and steel goods were about \$3.3m and of engineering products \$1.2m.

In these terms, the structure of Indian exports has changed completely. The spread of markets to which India is exporting is wide and well dis-tributed. Although the West as a whole takes more than half. of India's exports if Japan is included, several regions of the world take more than 10 per cent of India's goods: 13 ner cent goes to the Middle East, 16 per cent to Eastern Europe and 12 per cent to developing

Manufactured goods account for about 60 per cent of the exports (though this year the percentage may be lower) with tronics, and chemicals.

Mr. Kelkar points out that the

eoncentration index " for products has declined to 23 and which the exports go, has declined from 69 in 1947 to 22.
A curious feature of the paper is that the Commerce

growing and exports jeopar- share does not seem to be

What the future is for Indian exports is difficult to analyse. expansion. Anyone who has seen the vaciety and the quality of some Indian exports can only be surprised that they are atill so low. The Middle East still offers opportunities. Indeed, though at the time much was made of Indlan successes in that region, the Indian Chamber of Commerce cites figures to show that between 1971 and 1977 the Indian shace of Arab Markets' imports, actually declined from 1.76 per cent to

Greater sales

With the opening of the Indian Trade Centre in Brussels apecialising in seven major product areas, it might be hoped that there will be greater sales at least within the EEC as Europeans get a better charce to see the range of Indian goods and Indians may better appreciate the European market and its wants and needs.

But after a short time, anyone considering the issue humps hard against the queation of whether India really wants an export boom oc is prepared to take the policy measures to act it going. Against practically all exports there are questions and clashes with India's overall economic policy as it is now set

Traditional items like tea, Institutions. jute and leather have this year. sbown a brighter picture than non-traditional exports. Leather frequently in Government than exports rose by 2g per cent, business officea, was that Indian cotton textiles by 17 per cent goods were suitable for other and jute goods by 20 per cent developing countries. Seen in in the first half of the year, as the wrong way this might be a large part accounted for by in the first half of the year, as the wrong way this might be technology intensive products such as engineering goods, electronics, and chemicals.

in the first half of the year, as the wrong way this might be engineering exports fell by 21 regarded as dangerously per cent and lewellery by 41 paternal. The fasler developing per cent as the world market countries might prefer to buy shrank But in the traditional higher technology and more items, especially tea and jute, expensive goods from the West the growing home market has if they thought they were being

minority share of production. they were shoddy. To quote Bad harvests because of drought, one trade official from South irregular shipments and the East Asia: "The quality of

Clearly from that acount, it from neglecting trade, Mr. it thinks of as an excess profit is not just a failure of power. Kelkar almost apologises that as prices rise bave also contributed to make India what it frequently comes almost io

> With forecasts of domeatic demand rising as high as 1,200 to 1,400 kilograms by the turn of the century against present production of 545 kilograms, there is a need to replant and extend the size of the gardens if exporting is to continue. But tea interests say that with the heavy rate of taxation "there is precious little left for ploughing back, and credit has become tight and expensive these daya."
>
> Jute exports have also fallen to 40 per ceol of production and Mr. K. K. Bajoria, chairman of the Indian Jute Mills Association, expecta a further fall to 25 per cent over the next five

He complains that it is diffi-cult to increase labour pro-ductivity as some politicians are demanding that the manning levels should be increased even though in the Indian mills four or sometimes five workers are doing the jon of one person in an equivalent European mill.

The jute picture is complicated most of the mills are nearly universally regarded as poor employers, but in this traditionally large export area there is a case for doing something quickly while there is still time. Non-traditional items are not constrained by shurtages of land or production that is at the mercy of cature, but some of

cult to break down. They Include economic policy, political horizons, knowledge and adaptability of men and One remark which I encountered frequently, and more

awful. Ask them for literature oc.look at their packaging and

Another question is what will be the most important markets for India. And all the indications are that the high volume markets are in the West. The World Bank, in its annual development reports, has suggested that increasingly the Eastern European countries are going to offer competition rather than sales to developing countries, yet the demands of India's foreign policy may push it closer to the Soviet Union and emphasise the need for a balanced trade. Certainly it is noticeable that the pro-Soviet lobby in the Indian Parliament is hyperactive and when the West Is mentioned it is usually

If India wishes to increase

Such a rise calls for qualitative Calcutta tea interests call "a brown paper as if they are changes in production techresidual rather than an essential world exporter."

Another question is what will

Government policy.

Criticism

It is worth quoting from the evidence of the Indian Chamber of Commerce to the official committee under Prakash Tandon, head of the National Council for Applied Economic Research, a favourable market for Indian which is examining India's goods abroad. export strategy in the 1980s. In practically every lioe there is attitudes and policy.

tial investors. The vital role sary that a aeperate export-

10 years, a whole new style of flows and high capacity utilisa- project exports and capital operating will be called for, tion cannot be overemphasised, goods, "Indian industry has to com-

pete with modern, high tech-nology production processes of the Western countries. Therefore advantages due to economies of scale should he available to our industry by ensuring that the policy lowards technology in Indian industry promotes the use of modern competitive techniquea which alone can provide

Both the chamber and the Engineering Export Promotion an implied criticism of present Council stress the need for proper transport and port facili-"It is important to fashion ties, regular supplies of inputs the economic policies which have an impact on the invesihave an impact on the invesiengineering council also sugment climate, to create condi-tions conducive to maximum exports in future are going to capacity utilisation and make be in the field of capital goods them more attractive to poten and turnkey projects it is neces-

Finally, there are questions of the Government's attitude. Will it be prepared to aanction the investment and the additional Ilcensing to cope with a hig increase in exports? Can a slow-growing, slow-moving country like India, chugging along at 3 or 4 per cent a year, hardly above the level of population increase, hope to compete with a flexible Japan or Korea? They are growing at 6 to 10 per cent and already have licad starts in

technology and export contacts. Between 1961 and 1978, India's share of world exports fell from a mege 1.2 per cent in 1961 to a paltry 0.5 per cent in 1978. It will take a hrave new world of decisions to hold! India's position, let alone to

Kevin Rafferty

PROFILE: ADITYA VIKRAM BIRLA

The family business

ADITYA VIKRAM BIRLA is one of the bright young men of family: "If anything the Birla family, India's largest faster than we are." industrial group. He sits in a sixth-floor cool modern office cheerful with plants, smooth leather chairs and a catching modern picture, all in clean contrast to the grubhy but atill bustling Bombay all around.

Mr. Birla, is the grandson of G. D. Birla and the son of B. K. Birla. Although the various members of the Birla family protest that there is no such thing as a "Birla group" as in the government Monopolies and Restrictive Trade Practice legisfamily background helped him to get started.

MIT taught him about chemical engineering and "gave me a sort of confidence that I could not be fooled on technical matters." But a similar young man already reduced exports.

In a poor country the ready availability of "the cheapest beverage in the world" has increased home demand and reduced the exports to a lindians sell their goods as if and there "T made my own misminority share of production, they were shoddy. To quest takes and learned the tricks of takes and learned the tricks of the trade."

He still stands in admiration

of the older members of the family: "If anything they are

He makes a comparison allowed to expand in viscose hetween India and South East slaple fibre. So we are helping Asia as regards Government British employment by importclearance of new projects. "In ing from Courtaulds." Singapore, it is a few weeks; in Thailand, two to three months; in the Philippines, five to six months; in Indonesia, six to 12 months; and in India it takes two to three years.

takes one or two months, but in India it takes the banks five to six months and then the forms have to be sent to the Reserve Bank which takes another two to three months," Mr. Birla. who is still in his

30s, set up a carbon black plant in Thailand, with modern technology allowing a 60 per cent reduction of power because the plant usea the steam lt generates. One of the reasons for going to Thailand was because he could not get the plant in India "where we have to put up with 15 years old technology and wasteful inefficient pro-

He claims that "by not allowing investment, India is importing unemployment. We are not

He estimates that about 7 per cent of the husiness of the companies he is responsible for which include Gwalior Rayon, Indian Rayon and Hindustan takes two to three years.

"As far as finance is concerned, in South East Asia It where we export other than the surplus. There is duty protectlon all over Western Europe.

And unless we have further investments it will be difficult for India to export, as the home market is growing. As It is the home market has been sup-pressed. There is no hirepurchase or anything like that in this country to make for easy payment and to boost the market. There is nothing like that: banks do not even give you loans on property."

Like many older captains of Indian industry, he has great for the creation of rules, not hopes of Mrs. Indira Gandhi, effective government." who he says, "has already appointed committees to sort

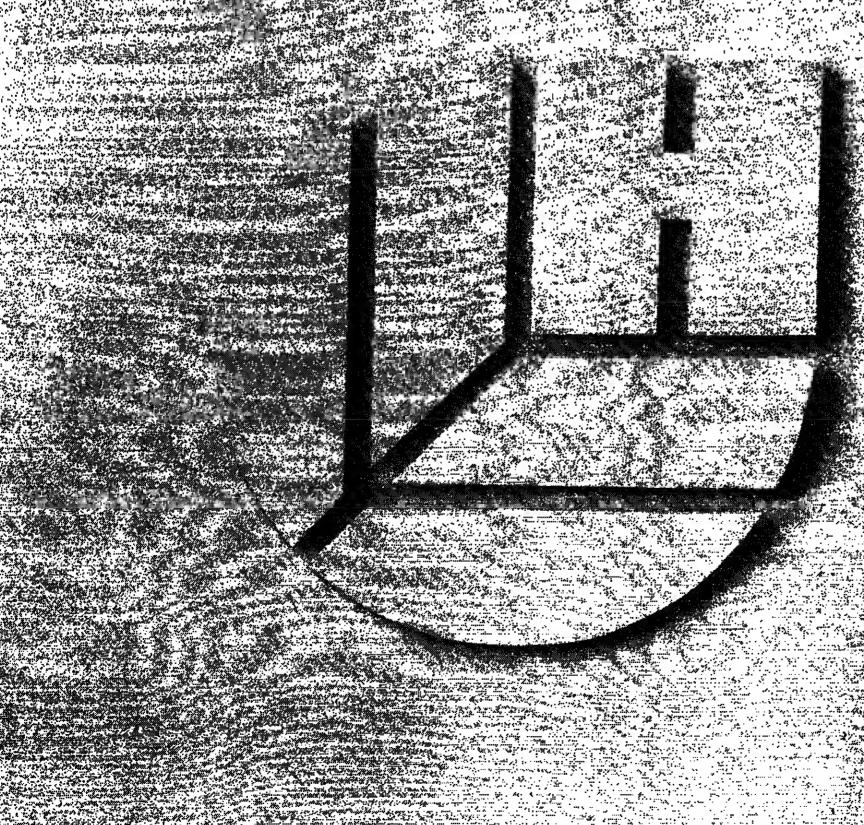


Aditya Birla: could not be fuoled

things out. She is a leader."
But then he cites facts from Mrs. Gandhi's previous spell as Prime Minister to point out what is wrong with Indla: "Dur-lng 1971 to 1976 we had 19 amendments to the constitution, 463 statutes, 97 ordinances, 30 regulations, 114 Presidential Acts for states under Presidential rule and 36,515 rules drafted, orders and notifications. many of them with implications

Kevin Rafferty

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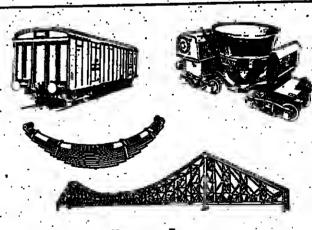
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Two-pronged attack to finance exports

AN EXPERT GROUP, appointed by the Government, is working on India's export strategy and its goala in the 1980s. Two suggestions are under con-

TRADE

First, India's share in world exports, which declined from 2.97 per cent in 1938 to 0.5 per cent in 1978, is to he lifted to 1 per cent. This involves raising India's exports from Rs. 57bn in 1978-79 te Rs 350bn in 1990-91. It smounts to an amulal rate of growth of 18 amoual rate of growth of 18 per cent in exports.

Second, India's share is to be second, india's snare is to be raised marginally from the present 0.5 per cent to 0.6 per cent in 1990-91. (12 per cent annual rate of grawth). In absolute terms, India's exports ln 1990-91 would be Rs. 250hn. Financing exports in the 1980s, according to the thinking in the Government, calls for a two-pronged attack. Taking first the more difficult task nf exporting non-traditional Items. a strategy has to he evolved to create the necessary infra-structure to handle the magni-

tude of exports envisaged.
The Engineering Export Promotion Council, a Governmentmonon council, a Government-sponsored organisation, has projected engineering goods exports in rise from Rs. 10bn (£549m) ln 1980-81 (April-March) to Rs. 93.91bn in 1990-1991—a nine-fold rise in tenyears. On the hasis of a modest Rs. 250bn target for exports in 1990-91, the share of engioeerng goods works out to 37.56

Apart from the consumer goods, whose export is handled by normal banking channels through letters of credit, capital goods and turnkey projects are expected to contribute to the export effort in a big way. Their exports are slated to rise from around Rs 5hn in 1980-81 to Rs. 46.45hn in 1990-91. Capital goods will thus maintain a 50 goods will thus maintain a 50 er cent share in total engineerng goods exports.

Against a negligible amount of Rs. 50m in 1955-56, engineergoods exports were worth Rs 6.85bn ln 1978-79 and by the turn of the current decade were expected to touch Rs. 93,91bn. However, India's sbare in the

INDIAN TRADE WITH SELECTED COUNTRIES (U.S. \$m)

	K vi	ports	101	MAT PO
· · · · · · · · · · · · · · · · · · ·	1970	1978	1970	1978
·	34.5	269.0	23.1	309.0
France			135.4	702.6
Germany	44.7		111.6	541.3
Iran	34.8		51	94.4
	12.4	45.1		810.8
Iraq	281.3	726.4	97.0	
Japan	20.5	110.3 ·	22.1	342.3
Saudi Arabia	234.7	562.7	140.3	739.9
UK	274.2	981.4	614.0	1,042.6
U.S.		517.6	271.5	207.5
. USSR	271.5		674.5	3,543.0
Others	825.8	3,414.3		
	2,024.4	7,091.9	2,094.6	8,333.4
	0.72	0.63	0.78	0.65
India'a % of world trade	V.12	0.00		

for credit terms, sales on currency loans, credit may account for 30 per A warking gre credit may account for 30 per A working group was set up cent of the total value of such in the Industrial Development exports. The normal practice is Bank of India, the apex bank that the cash component of exports. The normal practice is that the casb component of

are allowed up to 80 per cent. On that basis the quantum at credit is likely to increase from Rs 1.2bn in 1980-81 to Rs 11.16 bn in 1990-81. Besides, exporters of capital goods are required to furnish guarantees for advance. furnish guarantees for advance payment and performance aggregating 30 per cent of the value of the capital goods exports. These guarantees are required to be given in the case of all exports of capital goods whether or not on credit. Non-horsening facilities by the case of the capital goods whether or not on credit. borrowing facilities by way of guarantees will progressively increase from Rs 1.50bn to Rs 13.95bn by the end of the

Packages

The credit budget of India's a scheme to extend direct financial institutions is sought to credits to foreign buyers or be reduced by tying up credits given by OPEC countries whose given by OPEC countries whose aid is untied, to developing ing pre-shipment finance with countries. For instance, in 1977, banks for manufacturing bigh the aid was over \$5.5hm. equipment packages from India can be married to the OPEC flows to promote project exports. Also, there is the other source of private capital flows in the form of Euro-currency

The Government is exploring world export of engineering the possibilities to promote goods remains low at 0.21 per exports of capital goods to exports of capital goods to African and Latin American As the developing countries, countries, which are already who are the major importers of borrowers of Euro-currencies,

capital goods, are likely to ask against medium-term Euro-

these exports is 20 per cent and credit financing, with representatives of the reserve bank, are allowed up to 80 per cent.

Clearance will be given to the financing proposals from all angles under one roof. Indian exporters can now make husiness commitments to buyers as ments are available right at the

pre-bid stage. re-bid stage.

The IDBI already operates quite a few schemes to facilitate capital goods exports. It refinances term export credits granted by banks. The hank extends finance to borrowers in participation with banks, It has

institutions. value equipment with a manufacturing cycle of more than six months. Normally, pre-sbipment credit up to 180 days is provided by banks.

Despite the availability of these schemes, the capability of IDBI to bandle engineering goods exports of more than Rs 93m in 1990-91 is doubted As an apex organisation for domestic and external term domestic and external term financing, IDBI is preoccupied with the larger task of

in the Government, supported by an influential experters' lohby, is of the view that a separate export (or export import) bank is necessary. The proposed export bank will not only finance exports but also assume a promotional role. It is to undertake periodical review of the various markets for Indian products and guide the exporters right from the bid stage to execution of the con-

In the case of merchandise export the Reserve Bank of India has taken the lead in establishing the necessary infra-structure. On the basis of a report of Toda committee, named after a Japanese banker who studied the cost of export credit in India, the Reserve Bank introduced the export (interest subsidy) scheme in 1968.

It provides for compensating banks extending export credit by way of interest subsidy at 1.5 per cent per year to make up partially for their losses in interest earnings and banks are expected to change to the ex-porters 11 per cant interest per

In 1976, the RBI introduced a duty drawback credit scheme, which is intended to benefit exporters in the form of interest-free advances from banks up to 90 days against expected refund of indirect taxes levied on exported com-

modities. Export credit has been assigned priority for purposes of lending. At the end of May 1979, export credit given by hanks, was Rs 1447bn—an increase of around 30 per cent in 11 months.

A major problem for ex-porters is the sharp finctuations in the foreign exchange markets and the losses arising out of depreciation of the rupee. The strengthening of sterling, which is chosen as the intervention currency for external transactions of the rupee, has re sulted in sizeable losses to ex-porters. Since most export contracts are quoted in U.S. dollars, exporters want some sort of direct relationship between the rupee and the U.S. dollar established to avoid uncertainty.

R. C. Murthy

Government under pressure as import bill soars

WITH INDIA'S import bill soaring towarda Rs 85 to 90bn (about \$11bn) In the current year, the Government is under fierce pressure to reverse its policy of liberalizing imports.

At the moment the view in the Commerce Ministry is that with savings in some areas and with careful pruning in others it may be possible to bold the line and continue the liberal-isation. But if oil prices continue to rise.

It is a testing time. With It is a testing time. With India importing more than 60 per cent of its oll needs, half of its export earnings are immediately spent. From this immediately spent. From this
the economic choice is almost
between e crisis temorrow and
a crisis next week: if the
Government does not reexamine and restrict imports,
it may find its foreign exchange
reserves quickly eaten up; if it
protects the reserves by protects the reserves by restricting imports it may be tying its hands for the future become trapped in the worst consequences of import

While India's exports have remained sluggish the country's import been has continued and the slight trade aurplus of 1976-77 bas grown into a buge and threatening gap.
Merely by looking quickly at
the figures it is tempting to
suggest that oil imports should be cut—a thought that is reinforced by the sight of traffic jams in the main Indian clties wreathed in exhaust smoke.

Common sight

But the scope for reducing oil consumption is limited. Petrol sccounts for slightly more than per cent of total oil products consumption. It is a common sight to see Indians economising by fitting four people on to a motor scooter or motorcycle and squeezing up to 10 or more

In industry there are inefficiencies in the use of oil because of old plant, but the best boost to the use of oil in the economy would be to get the infra-structure sorted out and the power supply and industry run-ning normally so that wasteful use of diesel in private generators and in carrying coal across India could be cut out. And in the longer-term the search for alternative sources of energy is the only sure way to curh the oil bill. But that does not solve the immediately pressing

IMPORTS FOR SELECTED COMMODITY GROUPS (monthy average Rs m) ...

1974	. 1975	. 1976	197
636.5	1.118.9	732.1	102
55.9	60 8	169.5	: 359.
00.0	1 001 4		
	LULLE	174.9	162
155.2	. 150,Z	114.5	
363.5	. 391.Z	164.8	215
353.1	· 259.9	183.1	216
	83.7	133.2	159
579.8	778-8	815.9	733
	400 5	. E40 0	587
		340.3	
	167.3	144.1	. TAS
		. 122.8	193
	4 005 0	4 770 2	5.021
3,765.6	4,351-3	4,113.3	4,001
			٠.
	636.5 55.9 964.1 155.2 363.5 353.1 148.9 579.8 336.3 134.1	636.5 1,118.9 55.9 60.8 964.1 1,021.4 155.2 150.2 363.5 391.2 353.1 259.9 148.9 83.7 579.8 778.8 326.3 480.5 134.1 167.3 109.3 130.3	964.1 1,021.4 1,176.7 155.2 150.2 114.3 363.5 391.2 164.8 353.1 259.9 183.1 148.9 83.7 133.2 579.8 778.8 815.9 336.3 480.5 548.9

Some relief would be provided if India could get industry moving and curh the imports of steel, cement and aluminium, some of which India was exporting two years ago. Fertiliser imports could also be reduced and this would provide an allround boost to the economy.

In agriculture too India's erratic performance bas made the import problems worse. This year there has even been some talk of importing sugar to keep prices stable after production dropped from a record 6.6m tonnes in 1977-78, when India was able to export, to 4.9m tonnes in 1979-80.

In the case of sugar the fluctnations in the size of the crop are not caused simply by changes in the weather but by the complex interplay of the whole panoply of Government controls, support prices, fixed prices, hoarding and specula-

But the area where imports have grown most startingly is in edible oils. As India has increased food production and Even where the import of removed the need for food grain capital goods has been allowed imports, so edible nil imports against global tender officials have risen. This year they may are left with a lot of discretion. go up to 13m tonnes and the Thus, for example, the 1979-80 cost to Rs 10bn (£549m) which import policy lists 14 categories

Most economists expect that tenders, and addsedible oil imperts can only rise, n The selection of suppliers a year in 1973 to 5.5 kilograms ment of Heavy Industry.
in 1977 it is still a long way "Comparisons will be made below the internationally between Indian offers (competitive) and foreign offers on the

All in all, India imports little fatter i.e. cif cost plus import more than what is barely duty as applicable. The recom-

needed to keep the economy steadily moving. Policies of im-port substitution pursued aver the years bave brought their

the high level of exchange reserves, foreign exchange reserves, thanks to the previous narrowing of the trade gap plus earnings from tourism and remittances from Indians working abroad, the Janata Government had begun to liberalise its import policy. Whether "liberalisation" is really the correct word is open to dispute. Foreign economists have referred eign economists have referred to its as "de-bottlenecking."

Sets of rules

In spite of "liberalisation," annual document setting ont India's import policy is complicated by sets of rules and regulations, lists of items allowed under open general licence, restricted items, banned items and absolutely banned items, lists of canalized items, lists of categories of users, and categories of licences.

Thus, for example, the 1979-80 may make edille oils the most of capital goods import of which expensive item after oil can be allowed against global

edible oil impers can only lise. The selection of such global even if India steps up its own on the basis of such global production. Though Indian per tenders, foreign or Indian, will capita consumption of edible be subject to scrutiny by a nil bas risen from 3.5 kilograms committee act up in the Depart-

hasis of the landed cost of the

mendations of the empowered committee will be considered by the Department of Commerce for deciding the grant of import licences,

The response in the liberalisation bas been interesting. Private industry has argued that mure items should be placed under npen general licence and complained that it is still restricted because certain goods essential to production cannot be freely imported. The Pun-jab, Haryana and Delhi Chamber of Commerce, for example, mentioned difficulties with aluminium sheets, nickel sheets, soda asb and argued that imports of machinery should be allowed whenever required instead of only twice a year.

But the liberalisation of imports of capital goods has ment with opposition, especially from some of the beavy equipment; makers in the public sector. In spite of the devaluations of the rupes and inflation abroad and the benefit of their own lower wage costs, Indian beavy equipment makers still have difficulties in submitting lower tenders than their foreign rivals. This is especially so in the case of more specialised

Pressures from the Indian groups have been quite strong. The Economic Times newspaper recently warned the Government that though it might be tempting at a time of foreign exchange tightness to bring down the import abutters once again, the consequences at the very least will include turning India into a purveyor of second class technology.'

Some economists have gone on to argue that if it really wants to grow India should allow the breath of competition not only into the capital equipment industry but also into manufacturing and consumer

It is tempting to urge that a breath of fresh air would be good for India and that further liberalisation would sharpen efficiency and impel exports. But it would also bave tremendous implications for the vast spider's web of controls and vested interests, from politicians to officials to businessmen with their own strategic interests to protect. The best that can be boped is that the shutters are

not firmly pulled down. Kevin Rafferty

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Internal trading scene forms complex web

TRADE TRANSACTIONS inside tial commodities is borne out centres and cannot possibly India in 1978 accounted for by the fact that stringent statu-cover the rural areas.

Largely hecause of the size of the country and the locations of the bulk of the population in its 1m villages the Government has found it impossible to keep track of the innumerable retail traders, the smallest unit of which is probably just a basket balanced on a village woman's

 Yet most towns, districts and smaller administrative units have organised markets through which the complex process of thought it necessary to intro-marketing industrial and agri-cultural products is gone detention through an ordinance. through. From the stockists to the wholesale markets known as "mandis" scattered all over. tha trading community has created a web of its own. It operates in a freely competitive manner that is hard to find a parallel for in any other part

Methods

Aage Fabrice

l elegance.

Its representatives do not reveal the extent or methods of their operations fully and so they are the target of politicians when prices rise, as they are

The trading community itself considers itself a scapegoat and possibly this is true. It is easy to talk, as politicians and offi-cials do, of "black marketeers" and "boarders" at a time of scarcity such as when the monsoon fails and prices automatic-The traders themselves blame low production for system, formulated after inthe situation; and not wrongly. But it is equally true that their made countless recommendations of the system of the system

Rs133bn (£7.3bn), or roughly tory countermeasures have had 13 per cent of the net domestic product. This shows the immense amount of activity constants on a massive immense amount of activity conscale is borne out by the fact. needs of the country's estimated days of Mrs. Gandhi's emerative form population and also the substantial part devoted to what are strictly non-productive areas. Internal trade is difficult to monitor.

Toward substantial part devoted to the that, during the disciplining ad hoc measures when these effective procurement and arise. In the past three years, buffer stocking, if necessary this has taken the form of increasing supplies through imports, something made possible through the open under a voluntary discontinuation. centrated in catering to the that, during the disciplining ad hoc measures when these the open under a voluntary dis-

closure scheme. The "black money" operates widely to finance illegal commercial operation and is a major cause of the scarcities and rise in prices in India. Since the days of the emergency, it is thought to have accumulated again and is now virulently at work. This is one reason wby the caretaker regime of Mr. Charan Singh during the later part of 1979 detention through an ordinance.

derlines the need to regulate about and regularise the channels of trade, the bulk of which remains in private hands.

It has long been the aim of trade to be a long been the aim of the control of the long been the aim of the long the long

It has long been the aim of the Government to introduce a countrywide distribution scheme through a system of "fair price" shops. This really means Government controls and a kind of rationing with which private trade is always being threatened but which it manages somebow to prevent being introduced.

The Janata Government's product - cum - distribution

Official regulation of trade has to prevent shortages or adopting

cement and steel to mention only some items, bave been imported. But the introduction of what is described as an "enduring hasis for attaining the dual objective of growth and price stability" remains

Equitable

The aim is to introduce a permanent distribution mechanism that aids and guides allocation of items of mass consumption to all the people in a fair and This measure, called the equitable manner so that the un-Blackmarketing and Main-tenance of Essential Commodi-tenance of Essential Commoditenance of Essential Commodities Ordinance, has been formally enacted by Mrs. steps taken to achieve this by Gandhi and preventive detention is back on the statute bok. There was only notional opposition to it from Mrs. Gandhi's modities" which is acknow-opponents since it was initially ledged to be the idea solution hrought in by them. This underlines the need to regulate shout.

restructuring the import and export policies (for instance by imposing a han on export of items, that threaten to become scarce within the country), preventing speculation and hoard-lng largely through legislation (something that bas not worked), and the removal of transport bettlenecks and strengthening of public distribution system.

The production-cum-distribu-tion scheme for selected items But it is equally true that their operations, or a substantial part of them, are conducted furtively and with the object of cashing in on a difficult situation.

That there is a thriving black market in India for such scarce items as cement and steel or what the authorities call essential part to be limited to major orban objects is to establish at least

therefore taken a limited form will take a long time to do. It which consists mainly of trying also involves actual manu-

ports, something made possible by the comfortable foreign exchange reserves position.

Huge quantities of edible oil, cement and steel to mention only some items have been at the company to the company the cooperative movement, which is becoming increasingly important in internal trade, and cooperatives are considered to be the most useful agencies for the distribution system. Yet the movement has bad a mixed success and this is another reason for the fact that internal trada remains the favourite

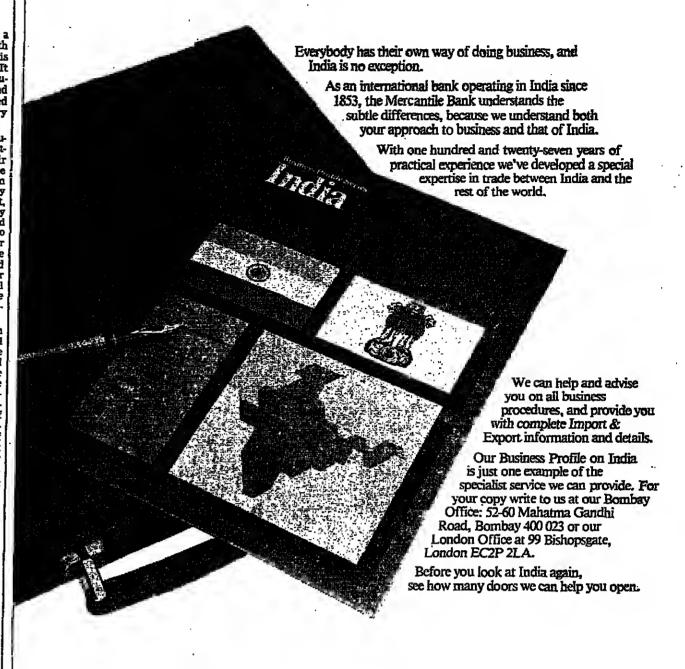
> By now—with the exception of the Marxists in West Bengal who have opposed the measure totally and announced they will not use it—most people share the Govarnment's view that the tion provision of the Blackmar-keting and Maintenance of Essential Supplies Act is necessary as a deterrent measure if prices are to he checked. Yet the State has many other weapons in its armoury which really need to be implemented to achieve the same object of

the Act. The main weapon is the Esser tial Commodities Act of 1955 which covers 65 items. Under its provision, it is possible to imprison violators for seven years after a summary trial, forfeit property and confiscate packages and other items being boarded.

Many feel that this is deterrent enough if properly used and all it needs is the will to enforce it so that the possibility of misuse of preventive deten-tion for political purposes is avoided. For the present, bowever, there seems to be no escape from the disorganised and uncontrolled manner in which the bulk of internal trade

K. K. Sharma

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Exports growth aided by promotion programme

fortunately there appears to he year, with a predicted annual a growing market in the growth rete of 25 per cent.

major industrialised countries This growth bas been accom-

This is because many of them have low added valua and require high labour input, and are therefore harely profitable to produce in Europe and the United States. The list of goods of this kind successfully produced and exported from India is growing ranidly. is growing rapidly.

They include scientific instruments, castings and forgings, builders' hardware, bicycles and components, car parts, hand tools industrial fasteners, electronic components, machine tools, and diesel engines.

These products are produced by a dynamic and expanding engineering sector, mada up of 125,000 manufacturing units (almost exclusively small private companies) which This growth bas been accom-

by an intensive export promo-tion programme, funded largely by the Swedish International

A number of exhibitions have the coontry is to maintain its production in the region of the contry is to maintain its production in the region of the contry is to maintain its production in the region of the contry is to maintain its production in the region of 22 per cent a year. Major united Kingdom, and the higgest yet is to be held in Rotterdam in May. For the first other reason than their price industry will be represented increasing volume and value if ponents with an annual value of 22 per cent a year. Major united Kingdom, and the huyers in Western countries do not purchase these goods for any time the whole Indian engineer of the volume and value if ponents with an annual value of 22 per cent a year. Major united Kingdom, and the huyers in Western countries do not purchase these goods for any time the volume and value if ponents with an annual value of 22 per cent a year. Major united Kingdom, and the huyers in Western countries do not purchase these goods for any time and value if ponents with an annual value of 2140m and growing at the rate of 22 per cent a year. Major united Kingdom, and the huyers in Western countries do not purchase these goods for any time the control of 22 per cent a year. Major united Kingdom, and the huyers in Western countries do not purchase these goods for any time and value if ponents with an annual value of 2140m and growing at the rate of 22 per cent a year. Major united Kingdom, and the huyers in Western countries do not purchase these goods for any time and value if ponents with an annual value of 2140m and growing at the rate of 22 per cent a year. Major united Kingdom, and the huyers in Western countries do not purchase these goods for any time and value if ponents with an annual value of 2140m and growing at the rate of 22 per cent a year. Major united Kingdom, and the huyers in Western countries do not provide the value in the region of 22 per cent a year. Rotterdam in May. For the first time the whole Indian engineering industry will be represented, including the heavy sector and companies able to handle whole projects. The fair is to be funded largely by the Dutch Government, and there are plans for a similar exhibition in Canada next year, for which aid will also be provided.

Dr. I. P. Singh, Acting High

IMPROVED EXPORTS of manual output of more than the Brandt Commission report mainly to the U.S., Britain, Holfactured goods are now vital £5.6bn and its exports are likely bad made it clear that the land and West and East Gerto India's economy, and to be worth nearly £600m this industrialised world now had many.

mexpensive engineering panied, and obviously assisted, interests. Development Anthority and the of Indian manufactured goods, International Trade Centre, a which must he exported in

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little option but to trade freely with Third World countries since it was in both their

private companies) which private companies) which commissioner of India to the domestic industry, which in the domestic industry, which in the country's manufacturing labour force. The sector has an ing of the Birmingham fair that nearly £330m. Exports are

The value of hand tool exports has also risen steadily to more than £20m a year, achiev-ing an annual growth rate of He praised the role of the about 45 per cent. The main Trade Development Anthority customers are Western Europe. of India for its active promotion the U.S., Japan and Australia.
of Indian manufactured goods, About 300 companies in
which must be exported in India are producing car comincreasing volume and value if ponents with an annual value of

to around more than £10m in

value out of a total production level of about £57m in 1977-78. India also manufactures nearly 30 per cent of the world's diesel engines in the lower horsepower range. With current production in excess of 300,000 units a year from more than 800 factories, it is an important industrial activity. Exports of diesel engines were valued at £9m in 1977-78 and engine parts

Improved quality

But one of the major constraints on manufacturing industry is lack of capital and new technology, which comparties from developed countries can readily provide. The Indian Government hopes that trade fairs will allow companies to see the improved quality of Indian goods and thereby encourage joint ventures.

According to the Indian Investment Centre, an international advisory body funded by the Indian Government, about 50 joint venture agreemeots are signed each year, differing according to nature of the project.

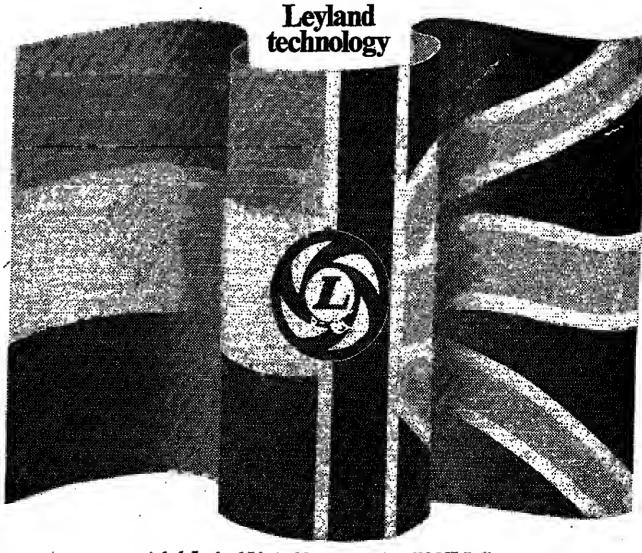
Some are set up with the main object of exporting the product, usually through the foreign participant, while others are based on domestic demand. although there is usually some provision for exports.

The Investment Centre, with offices in London, New York, Tokyo and Dusseldorf, is one kink in a chain of authorities working to provide India's growing industrial espacity with outlets in the developed world. Lorne Barling

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TRADE

Time for fresh view of foreign investment

nowhere near the top of anyone's list of priorities for moving the Indian economy into top gear. But there is a growing and influential number of people who believe that better incentives for investment might be a part of a competitive package to stimulate and open up the economy.

Now would be a good time for fresh look. The massive task of revising the structure of foreign capital under the Foreign Exchange Regulation Act (Fara) is nearing completion. Under this Act big foreign groups bave bad to reduce their Indian holdings to less than 40 per cent unless they can prove e special case, like belng in a key technological sector or big exporters.

Restructuring bas sometimes been painful, but the rationale of the Act was that India had no need for foreign domination of consumer industries—which was a throwback to the days of

For India it is e matter of pride thet it is the tenth largest industrial power in the world. The country can make bosts of items from basic consumer needs to textiles to heavy and sophisticated engineering goods to computers to ocean-going ships, so there is an attitude of: "Why do we need these of: "Why do we need these foreigners to come and tell us bow to make things? After all we only got rid of them 33 years ago and do not want them coming back now by the back door of economic colonialism." Even giants such as IBM and

Coca-Cola closed their husinesses in India. IBM was not prepared to dilute and Coca-Cola was not prepared to divulge the magic formula for making its drink. India let making its drink. India let them go. There is still a lot of foreign capital in India, with Britain in the lead with an estimated £350m. There is also a feeling that foreign know-how might prove a sbot in the arm for a struggling economy. But there are also a lot of old antagonisms to be conquered first.

Suspicions

As a developing country India retains intense suspicions of multinational or transnational companies. At times this produces a strange lack of national confidence with national confidence, with specires of the great dreaded multinationals evading the thick net of Indian hureaucratic controls,

Nor has the political or the academic debate offered much incentive to foreign investment. Slogans of socialism and chauvinism have dominated the debates. Demands for controls are common—even if the controls would smother Indian enterprise and initiative too.

Thus an article last year in the special number of the Economic blamed Weekly foreign economic powers of hand-in-glove with the big Indian industrial houses: With an eye to quick profits and control over the labour process, monopoly capital which was already well-entrenched, found contemporary Western technology much too attractive.

FOREIGN INVESTMENT is even if in the process industrial nowhere near the top of employment and the size of the bome market got narrower, and the country hecame financially and technologically more dependent on

foreign powers.

Another article in the same weekly ooticed the efficiency superior growth and profits of seven big companies with foreign roots including Ashok Guest Keen and Leviand. Williams, Hindustan Brown Boyeri and Philips India, in the engineering industry and warned: "The multi-national warned: The interest of the control resources and access to tech-nology. They could always use these advantages to grow dis-proportionately in relation to the industry.

Attitudes

But equally foreign attitudes to India are not too compli-mentary either. A husinessman who has had many dealings with India commented: "Even trad-ing decisions on whether an order should be placed abroad that could be done in India take a long time. For investmant there are so many papers and authorities to clear

A foreign diplomat with years of experience of India attitude to foreign investors: They sey if you jump through this boop and this boop and this one and this one and you are In e line that we approve of and promise to export and return, then we will consider allowing you in."

Perheps, not surprisingly, commercial attaches in Bombay and Delhi are looking more closely at prospects for collaboration agreements and exchanges of technology rather than direct investment,

with this overall picture of slowness and red tape there are still people who believe that India deserves consideration as a worthwhile place for foreign investment; and there are others who believe that with the new Government of Mrs. Indira Ganditi the climate may change and potential investors find a more welcome door.

Dr. F. A. Mebta, the economics director of Tata, said: "For the foreign company there are several questions. Is the product be is making of such a technological type that he can convince the Government of the need for a major holding. If so, then irrespective of the pressures and the delays, he will have something that he can sell." In today's India, new high-technology products that will assist agricultural growth benefit power or transport are obviously attractive.

"There is also the question of where else the investor will go," added Dr. Mebta. "For companies in a growing number of countries, like Norway, Sweden, Switzerland and West Germany there is not enough labour to do some of the jobs. Other developing countries may have more attractive climates for investment, but India has its size and in spite

of the low growth there is plenty of skilled manpower.

"Then there is the political question. This is not a question he economist can answer, but in corporate boards round the there is a good deal of turmoil world at what is going on in countries previously considered stable. I am reminded of the statement by Trotsky "Banish the word stability from the dictionary of the 20th century. The medie does not offer much belp in being able to predict trouble. As far as India is concerned it bas its political prob-Iems, but still it goes on.

Anothar leading businessman, Mr M. S. Patwardban, managing director of National Organi Chemical Industries and presi-dent-elect of the Bombay Chamber of Commerce, also helieves that for some companies it may be better to be in India.

"If you have a lot of dealings with India it may be more comfortable to be manufacturing with an Indian partner. If you are on the outside and have to send a man put him in the Taj Hotel, it can get expensive he gets lonely, does not know his way around and does not do the best job.

Selling technology is right, but there is no real joy in the sale of technology. A businessman wants a piece of the action."

Both Dr Mehta and Mr Patwardhan believe that a presence in India is a real asset. Knowing the right people belos enormously in the time-consuming business of what Dr Mehta calls corridoring "-meeting Govallow us to set your rate of ernment officials. Some businessmen have calculated that in India they spend 45 per cent of their time dealing with officials, whereas in Germany a similar businessman would spend only 10 to 15 per cent of his time with Government.

Both men say thet companies already in India have proved the benefits of an Indian base end both cite Fera not as a time of disinvestment, but as a time of opportunity. Companies which knew how to use the Act, especially Hindustan Lever, ICI and ITC (formerly Imperial Tobacco), were able to expand into areas they would not have dreamed of before. Faced with the prospect of disinvestment and an outflow of foreign exchange, the Government was delighted to see expansion as a way of reducing the foreign

Domination companies did

spareholding.

invest, especially the smaller ones for which "the jump from hoot polish to pesticides" as one British controlled group put was too much." Ironically. the Act to bring foreign domination of the Indian economy under control, may well produce giants out of previously big groups. Dr. Mehta estimates that in two or three years when lts expansion programme, including a cement factory and plant for making sodium tripolyphosphate, is completed the assets of Hindustan Lever will rise from about \$140m in 1977 to \$400m. This could make the company India's third biggest in terms of assets after the Birla and Tata groups.

Hindustan Lever is still trying to keep a majority British shareholding as it says that more than 60 per cent of its investments in fixed assets are in the core sector or in sophisticated technology and that more than 50 per cent of its managers are scientists and technologists. The company also argues that a majority shareholding will give Hindustan Lever privileged access to the parent's technological advances. The company's chairman, Mr. T, Thomas, an

Even without the boost of Fera Mr. Patwardban says that foreign companies have done well in India. He studied Hindustan Lever, Sandoz and Philips and says that they show an incraase in sales turnover between 1969 and 1978 of between three and six times, an increase in net worth of more than three times, and in profit after tax of two to four times.

Package

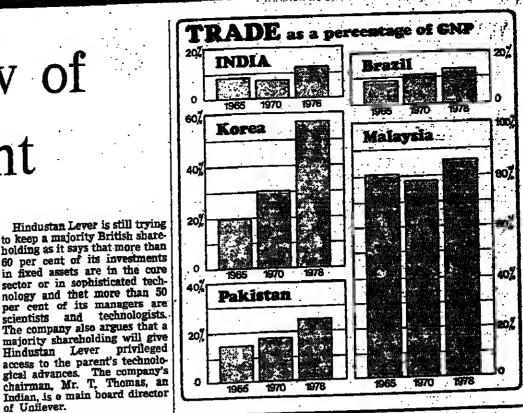
The other important bonus of being already in India is that it is an insurance should the policy change. As it can take anything from 18 months upwards to get any investment deal completed this is an important lead. It is still early yet, and the Government is more yet, and the Government is more intent on sorting out its politicel problems, hut there have been one or two slight hints that e more open mind towards foreign investment, within the restrictions of Fera might be part of an economic

Reports in the Indian Press that New Delhi might allow foreign oil companies to drill are surprising, if only hecause foreigners consider oil to be one of India's success stories, where it bought the know-bow, put a good manager in charge, and discovered and landed its own

There are some pressures in favour of investment from Indian businessmen, some of them newly discovering that other Asian countries can manage their controls more swiftly than India. One man said: We put up a factory in Malaysia in three months; in India it would take that amount of time to get the licence for the cement to build the

Mr. Patwardhan says: "The question is how we hring about we try to do it all on our own, or do we seek technological help. Japan did not invent the diesel engine all over again; it bought the best technology in the world as the hasis for its

But be adds that in today's rapidly changing world "the best way of getting technology and of ensuring continuing ess to improving it is to bave a foreign partner. There is no reason why we should be taken for a ride. India is not a small country, say a Chad or a Mali, but e big one with competent businessmen and officials to see that we get a good deal." It remains to be seen whether the Government takes bis advice when it has worked its way down its list of priorities.



PROFILE: Dr. F. A. MEHTA

Apostle of rapid growth

had eight years running this country. India would be importing lahour, not exporting it to the Middle East and elsewhere." he bas an even more ominous probably another 500,000 in warning: "At the rate things are going Indlans will be aating on them; more jobs in making into each other." into each other's entrails in the fight to get jobs, houses, food, because of the lack of economic growth.

As be is economics director of Tata Sons, one of India'a top two industrial bouses, it may not be surprising that Dr. Mehta's views diverge from those of government

"This country bas chained itself. Think small, be small, eternally remain small, that is the motto. Indian economists disciplined to think this small (he makes a gesture as if taking a pinch of snuff) until of course it comes to their UN

It is not just the officials who excite his wrath. He clearly sees a conspiracy involving husinessmen as well as officials and politicians. "Let us suppose that Bally wants to come to India to Invest in shoemak-

ing with an Indian partner. If I were a rival shoemaker I'd also go ahroad and seek the help

lot of lip service to socialism. But I am the true socialist Let India make 250m pairs of shors a year, not a mere 65m, so that every adult can bave at least a pair a year. I want to bring a television set into every home. Why should the rich be the privileged ones." Taking television

example, be aays: "A few years ago, a friend ventured the opinion that by 1982 India should he making 300,000 tele-vision sets. His lips were quivering at the enormous figure. I startled him by saying that by 1982 Indie should aim at 15m sets a year.

"Look et the jobs that could Kevin Rafferty be created: 2 to 2.5m in the

Dr. F. A. Mehta factories making the sets; 1.5 to 2m in sepling them; 1 to 1.5m in repairing them; the programmes; and extra income to create even more

"Instead what happens it is decided that a TV set is a luxury. There is the cascade effect of heavy taxes. Then 40 entrepreneurs are licensed, a number reduced to 28 as the diseconomies of scale hite and force some out of business. By torce some out or business. By the time the set is finished the intellectual target is reached: the TV set is a luxury which only the very rich can afford.

And far better for the Government to take 5 per cent tax each on 9m television sets—the rest would go to export—than 65 per cent tax on 300,000." For good measure he adds that tiny Taiwan has almost reached

production of 15m television He provides a couple more examples of the lumbering slumbering Indian economy by reference to Singapore: "In Singapore almost all taxi-drivers have colour television in their home. In Juroog a I.5-ton air conditioner costs the equivalent of Rs 2,800; in India, such are conomies of small production the

tioner costs Rs 12,600. The answer is to raipid economic growth of eight to ten per cent, and to plant redistribution mechanisms that do not impair savings or investment. I am not advocating a Brazilian pattern."
But thanks to the baneful

influence of dismal economic schools of Oxford, Cambridge and LSE, though Dr. Mebta is a product of LSE. Indie "this ricb country " continues to take the low road. And Dr. Mehta stays in India in spite of heing offered jobs in three other countries as economic adviser

Kevin Rafferty



Calcutta: a great need for huge investment

CALCUTTA. THE Manchester were pavements, spilling over 1943, Japanese annexation of 150 days, at a cost of 100,000 of India, is suffering from a into milky gurgling pools that Burma cut off north east India man-days—output has been hit number of economic ills, many bouse the city's standpipes—the from its granary. Facing wide—hard. The power stations have of them similar to those felt in only source of water for most

about the future that is prob- as best they can. ably based on the assumption that things cannot gat worse.

more to gain from the country's north with southern Calcutta, is new liberal trading policy than almost anywhere elae in India.

Fresh investment is needed on a grand scale, and West Bengal's the densely populated business Marxist government is so keen centre. It is unlikely to be to dispense economic medicine finished for a decade yet, and that foreign companies and the chaoa it will cause is unforeign capital could play a fathomabla.

A. MEHTA

Most people know Calcutta for its terribla poverty and hor-rendous overcrowding. It is easy to forget that during tha halcyon days of British colonialism, Calcutta was capital of India and the generator of wealth and industry for the whole subcontinent. While its port handled the lucrative trade tea and jute, large-scale industries, particularly in steel and heavy engineering, grew up around the considerable coal and iron ora deposits of West Bengal and neighbouring Bihar. It was a city built for 11m. so it remains. As its industries have run into trouble, so the

and poverty remain a common-place for the teaming millions populating the city. It was a city built for 11m. but the sprawling metropolitan area covering 240 sq miles along population of 13m. The narrow streets are choked with the homeless, the hawkers, beggars.

extremes of Victorian squalor

cows and mangy dogs. In their midst, huge rubbish

Britain's industrial north-east. people living in the city. In spite of e-sustained and An estimated 100,000 dilapisteady decline from its once dated taxis weave around the unchallenged position as the lumbering trams, leaving the industrial metropolis of the man pulled rickshaws and Indian subcontinent, business coolies with handcarts to fend men seem to have a confidence for their lives and livelihoods

To make matters worse, a that things cannot gat worse. Russian-designed underground commodity. It has taken many Calcutta and its industrial railway intended eventually to years to recover from this blow. hinterland nevertheless stand link Dum-Dum airport in the more to gain from the country's north with southern Calcutta, is

Rising cost

While Calcutta bas relinquished its position as the foremost industrial centre in India -Bombay and its hinterland overtook it in the early 1960s —it is still a powerful com-mercial force. Behind only Maharasbtra, West Bengal offers twice as much factory employ-ment as any other state. Its port, bandling almost 8m tons a year, is the country's biggest behind Bombay.

It is still the bome of tea and The relentlessly rising cost of synthetic fibres, closely linked total, to oil prices, bas given jute Agg products a new lease of life. Demand for tea bas spurted, through a decade of terrible both at boma and abroad. Some labour trouble, particularly in

spread famine, millions flooded to Calcutta. Then with the partition of India in 1947. Hindus flocked to the city from the new Moslam state of East Pakistan, now Bangledesh.

At the same time, the jute industry was spliced, with factories in West Bengal cut off from their sources of the raw commodity. It has taken many Two wars with Pakistan have disrupted this frontier state and created fresh floods of refugees. A strange paradox resulting from these successive influxes

is that Bengalia make · up a minority in their own capital, with just 35 per cent of the population. Industry was also severely hit by the widespread industrial sabotage associated with the Naxalite uprisings a decade ago. In the midst of industrial chaos and political turmoil, many industrial and commercial houses fied. By and large, their

factories remained, but bead-quarters were moved to Bombay

along with the lion's share of

along with the lion's share of subaequent investment.

Reflecting this decline. unemployment probably stands around 6m in Bengal. The state boasts more "sick" industries than any other state—that is, companies unable to pay divijute industries. While trade in dends or no longer entitled to these commodities has been flat draw credit from the banka. in recent years, there are signs Bengal has around 80 "sick" that business is bucking up. large industrial units - more than 20 per cent of the country's

Aggravating the situation still further, the state bas lived through a decade of terrible tea traders now say domestic the core industries of coal and demand is growing so fast that power. As output from these exports are being squeezed as industries has been bit, so all production cannot be raised fast enough.

With strikes at an all-time

produced an average of 25 per cent of their total capacity. leaving many industries without power for between six and ten hours a day.

Ailing plant

Major industries, such as General Electric, lost between 10 and 15 per cent of their capacity in 1979 because of power shortages. Many smaller companies have been losing between 30 and 40 per cent. Both government and business

spokesmen admit that declining ontput is also due to the inadequacles of aged and ailing plant. Like Britain's industrial north east. Calcutta is saddled with ageing industries and outmoded. inefficient technologies. Huge amounts of fresh investment are urgently needed.

Thia is well illustrated in Calcutta's port, which is separated from the sea by 86 miles of "bara, bores and bends" along the Hoogbly river. Wharves, warehouses and loading methods still date back to the 19th century. Recognising this, the Gov-ernment has built a new port downriver at Haldia. After three years in operation, with a con-tainer terminal and an oil jetty, Haldia is using just a fraction of its capacity, because the road and rail network linking it with Calcutta and the region needs extensive improvement

West Bengal'a Marxist government acknowledging these needs, seema keen to provide new opportunities for domestic and foreign investors India's more liberal import policy offers im-proved prospects for foreign companies, paticularly in the coal machinery and power sectors. New opportunities for foreign investment have been recogoised by international bankers, like Lazards and Kleinwort Benson, who have been busy recently assessing prospects according to diplomats

When the Marxists first came to power in West Bengal in the late 1960s, they aroused alarm throughout the business comnunity. But that apprehension has been doused by what one diplomat called "totally responsible" government. A foreign businessman assured that the

Calcutta street scene: the extremes of Victorian poverty remain commonplace government of Mr. Jvoti Basu

which won back power in 1977.

had done its best to create a

milieu of tranquility"

business to work in.

Explaining the paradox, Finance Minister Dr. Ashok Mitra claims that revolutionary policies would only be possible if the communists won power in Delhi. In the meanwhile, siming to consolidate power in West Bengal by showing they can offer more effective government than any other party, the Marxist's see higher investment and raised industrial activity as the only means of reducing unemployment and ameliorating poverty.

labour relations. One foreign business can confessed that the Government supported the unions in driving a hard bargain in wage negotiations, but once a deal was signed it was proving effective in persuading workers to get hack down to work until

next wage round was due. It is indicators like this that have generated a new, if cautious optimism among businessmen in Calcutta. Hard bargain

Mrs. Indira Gandhi's victory in January's general elections bas nevertheless created new Jyoti Basu's government has uncertainties, West Bengal was be keen to see Mrs. Gandhi re-impressed businessmen with the almost alone in rebutting Mrs. sume power in West Bengal. In

there wil be "an almighty showdown sooner or later between Mrs. Gaudhi and the Communists (in West Bengal)." One diplomat felt "a freak and dangerous situation at the moment."

It is rumoured that 10,000 Communist Party cadres have already been sent underground and that a second rank of party leaders has been selected in anticipation of the current leadership being arrested and

In theory, businessmen should

way it has set about improving Gandhi's Congress party. As the fact, few relish the prospect. Not rest of the country has fallen only do they feel they have at into her palm, so one independent observer anticipates that relationship with the Marxist government, but they also have no love for the Congress parly, which has traditionally played a disruptive and irresponsible role in the region.

So, like those states in India now languishing under President's Rule, Calcutta awaits Mrs. Gandhi's next move. Most feel that if she leaves the Marxist government alone, then the region can look forward to better days shead. If she chooses to be vengeful, then chaos is Inevitable, and cutta's economic decline will continue unchecked.

David Dodwell

The region has had more than high in 1979—for example, the its fair share of set-backs. In port was strikebound for about Bombay bursting at the seams

BOMBAY, gateway to India for Bombay alone pays 32 per perty prices around Rs 500 per traders since the 18th century, cent of the country's income tax, square foot in the middle of is a city bursting at the seams. and 50 per cent of all central Bombay, even Rs 600,000 will only buy a two-bedroomed flat. cope with the volome of trade. The beadquarters of all meeding to pass through it. domestic banks—including the while the city, trapped by the sea on the peninsular where it was first established are beautiful.

The beadquarters of all Many are forced to live 20 and 30 miles out of Bombay.

As a result, traffic congestion was first established are beautiful. was first established, can barely provide the most basic amenities for its burgeoning population.

At the undisputed hab of Indian commerce, and at the centre of the country's fast-growing industrial beartland, one would expect to find businessmen brimful with confidence—particularly following the victory of Mrs. Indira Gandhi's Congress Party in the recent general elections. It is widely believed that Mrs. Gandhi's government will be sympathetic to big business. nessmen brimful with confi-

Instead, one hears complaints that the cost of living—particu-larly the cost of housing—bas soared, that industrial unrest is on the rise, that crime is increasing, and that basic publicservices are deteriorating as the

city becomes too unwieldy.

Garbage piles up even in the smartest residential areas. Power cuts are an everyday occurrence. Even the grandest buildings seem to have seen better days. There are now an estimated 560 slums in the city. while a buge population lives in squalor on the pavements.

Bombay is almost completely a creation of British colonialism.

Ceded to the Portuguese by the Ceded to the Portuguese by the Sultan of Gujerat in the early 16th century, it came into British bands as part of the dowry given to King Charles II when he married Catherine of Braganza in 1665. Bombay was then a series of small islands, but the British joined them up by land reclamation, then set up. by land reclamation, then set up a fort and a trading post.

Sabotage

The city was soon one of Asia'a biggest sea ports, getting a big boost in 1869 when the Suez Canal was opened: A huge textile industry grew up around the city, while the hinterland, now the state of Maharashtra, a host of new industries bas mushroomed, such as chemicals, pharmaceuticals and heavy

Manufacturing industry in the area has received several recent boosts. First, over a decade ago. an outbreak of industrial sabotage in the north east of India lead by the Naxalites prempted. a flight of investment away from Calcutta and West Bengal overto the west of the country. Second, Bombay found itself

perfectly placed to plug into the ell-based prosperity of the Middle East. Finally, the dis-covery of oil offshore catalysed the rapid growth of industries based on petrochemicals, and involved in the manufacture of products like in the and

Want Tantill

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AND SELLISH TARREST !!

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建建建 計刊 [117]

The pre-eminence of Bombay and Maharashtra in Indian industry are easily. Hustrated. The state provides 18 per cent of them to reap bigh say the port cannot be operational for at least five years. A new port would mean a new form industry for new lease of life for Bombay the contraction of the con of the nation's invested capital earns bis living honestly can new lease of life, the whole of lit-provides a guarter of the gross afford to buy his own home India stands to gain.

Output and value added of nnless he is prepared to live in the city.

While the city's backbone industry—textiles—bas bad a lean time in recent years, both because of a depressed world market and because of mounting need to replace antiquated machinery and factory methods, other industries bave grown

maceutical giants like Pfizer, Glaxo and May and Baker, beavy engineers like Larsen and Tonbrn, and electronics in the new SEEP Zone. A substantial construction industry bas musbroomed under the stimulus of business in the Gulf states.

Even companies with most of Even companies with most of their operations far from Bombay tend to establish their headquarters there. Tata Engineering and Locomotive Company (TELCO), for example, with its operations in Bihar, and the giant Birla group with factories all over India, have headquarters in Bombay.

Mounting physical congestion.

Mounting physical congestion in Bombay itself bas forced industries to aet np operations further and further from the metropolis. A dense industrial belt now stretchea south west all the way to Poona.
It is not only Bombay'a favourable geographical location and its leading role as a port-handling 15m tons of cargo a-year—that bas attracted invest-ment. It bas established a reputation for high entre-preneural skill and responsiveness to new industrial invest-

ment, and bas a large reservoir of skilled workers. More than 30 per cent of foreign investment in India is focused on Bombay and its binterland, though foreign investments make up only a tiny part of total investment in

For all the industrial growth seen over the past decade, industrialists seem to feel things could have bean better.
They heve been dogged by a "economic drift" during the past three years of indecisive Jenata rule. Dissolution of the state government and imposition of President's Rule by Mrs. Gandhi just a month ago maans they must live with uncertainty for several months to come.

Many industrialists appear nostalgic for the "first rula" of Mrs. Gandhi's emergency Mrs. Gandhi's emergency period, which effectively elimin-ated most labour disputes and

the country's factory employ property, are heartily resented: itself, and for its vast industrient, and has: almost: 19 per cent Mr. Pandit claims: No one who trial hinterland. With auch a of the nation's invested capital earns his living honestly can new lease of life, the whole of

settled in Bombay. Many, like the Mercantile Bank and the Chartered Bank, have recently shifted beadquarters from Calcutta in recognition of Bombay's position as the country's commercial capital.

While the city's bank on the single spinal road to the business centre at the south of peninsular Bombay is appalling. Queues rarely clear before 8,30 in the evening. The commuter subway carries 1.4m people a day and is so congested that many commuters are now catchmany commuters are now catch-ing the empty outgoing trains in the morning as the only way of getting a place when they turn round and travel back to the city from the northern terminal.

Huge exodus

apidly. The population of greater
This includes chemicals, pharnaccutical giants like Pfizer, rate of 40 per cent a decade
Glaxo and May and Baker, beavy since 1950. From fewer than sm, the population is now close to 8m. Most of this population lives in abject squalor and poverty. A huge number live under sacking along the pavements in conditions akin to those in refusee camps on the those in refugee camps on the Thalland border with Kampuchea. Few have any hope

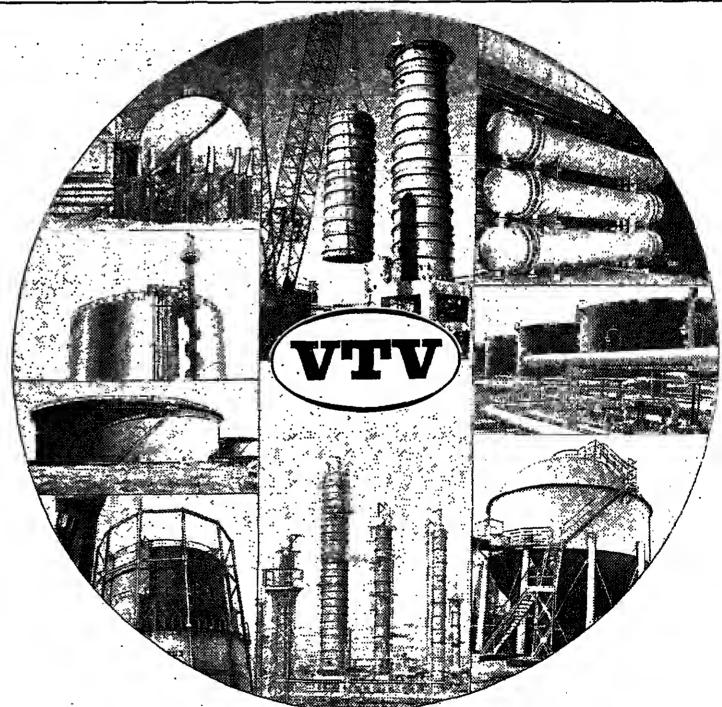
of permanent employment.
While these people suffer, so the wealthy feet they are suffering too. mainly because of a hoge exodus of workers to the Middle East. These people would once upon a time bave been eager to earn a living as servants, but the exodus means that servants are increasingly difficult to get. So too are craftsmen like carpenters, mechanics and plumbers, who have found they can earn hand-

nave found they can earn hand-some livings in the Gulf states. At the heart of Bombay's problems is its ageing port. Built to cope with the clippers and early steam ships of the 19th century, the port is quite incapeble of coping with the demands now being made of it. The dock entrances are too narrow for large modern ships, and the

water is too shallow. The most modern cranes date back to the 1950s, and most cargo is loaded and unloaded manually. Warehouses will collapse, of their own accord un-less they are demolished soon. Nor can one ignore an appalling record of strikes, go slows and general industrial unrest.

These shortcomings have resulted in bopeless congestion. At its worst, ships have had to wait for 80 days before being unloaded. Bombay's container capacity is tiny, and the container traffic is nothing short of chaotic.

Hopes that a new port will be built nearby at Nhava Sheva have been frustrated for ten years as the authorities in Delbl have dithered. There are signs that Mrs Ghandi'a Congress government is ready to give the green light but even optimists



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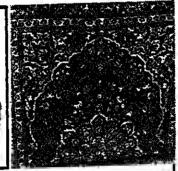
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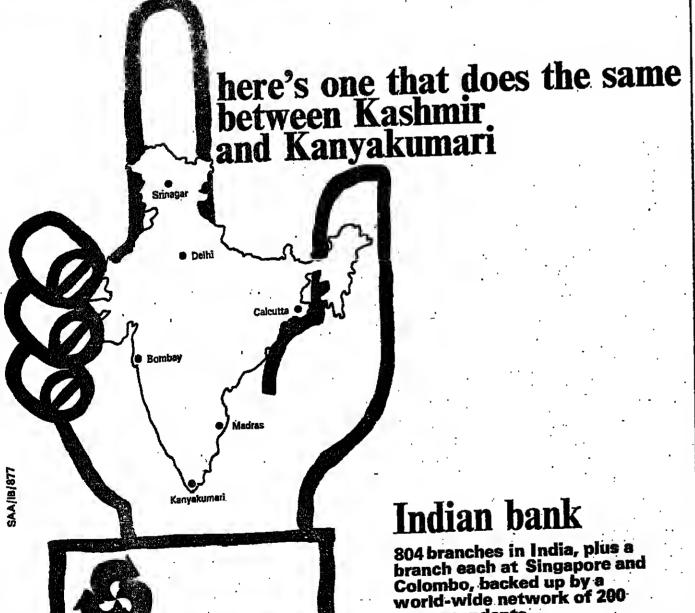


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Influx of industries changes Bangalore

ONE HIGH-RISE skyscraper already dominates the skyline of Bangalore's commercial area in the vicioity of Mahatma Gandhi Road and another is fast going up nearby. Many Bangaloreans. looking back with nostalgia at looking back with nostalgia at their city's reputation as an urhan garden; regret this intrusion of modern commercialism. Others point to it with pride, claiming that the 20-storey structures symbolisa Bangalore's ascent into industrialisation and its new position as a centre for industry and trade in India's south.

Bangalore, capital of Karnataka State, has certainly grown rapidly in the past couple of decades. It still does not match Madras as the main business centre in the southero region—after all, Bangalore is landlocked while Madras is one of the country's major ports—but the country's major ports—but husiness is hooming.

Its statistics are impressive. Nearly 50 per cent of the engineering goods exported from the southern region originate from Karnataka and this is a major index of the industrial progress that the State has made. It also explains why Rangalore its conital is why Bangalore, its capital, is fast asserting its claim to be the focus of husiness in the

sonth.

Perhaps the importance of Bangalore began with the decision to locate at least five major public sector industrial units there. This was mean to industrialise what remains essentially an agricultural State hut, it triggered the growth of ancillaries and feeder industries. ancillaries and feeder industries. Local husinessmen were able to cash in on what they call the

"spin-off effect".
The major public sector units are the Hindusthan Machine Tools, Hindusthan Aeronautics, Bharat Electronics, Indian Tele-phone Industries and Bharat Earth Movers.

Garden city

Each is a racognised profit-making giant with tentacles now spread over many other parts of the country and Bangalore is justly proud of their achieve-ments. More public sector units \$650m Kudremukh iron ore Larsen and Toubro, Associated project is the latest and most important—and combined with the growth of large medium and small-scale units from the private sector, have converted Bangalore from

acknoweldged progressive and economic advancing where hureaucracy rules supreme, industrial units and husiness offices are attracted to the fountainhead. But it also reflects the economic development that has consciously taken

The State remains predominantly agricultural and income from industry and mining is estimated roughly at no more than 12 to 15 per cent of its

chromite and the like, used its favourable climatic environment and usually munificent monsoon (which has endowed Karnataka with abundant forests) to surge ahead.

Karnataka has made considerable progress in several sectors in the past two decades. Its high irrigation and power potential, minerals, diverse soils, skills and industrial traditions have heen exploited by a combination of infrastructural development institutional network and incentives—although there are in-evitable complaints that much needs to be done under each of these headings.

Industrialisation began in Karnataka slowly and has picked up momentum only in the past two decades. Nevertheless, its first textile mill was established in 1884, its first hydro-electric power station (also the first in India) in 1902 while the Bank of Mysore began operating in 1913.

One of the State's main industrial projects still, the Mysore Iron and Steel Company (now renamed Sisvesvaraya from and Steel) was launched as long ago as 1918. In the early part of the century smaller units in sectors such as sugar, tanning and sandalwood started appearance. ing and in the second the major public sector companies followed. In their wake came such major successful private ven-tures as Kirkloskar Electric and Mico. Foreign investment followed and is growing, although

Tha effect of industrial Tha effect of industrial development can be judged from the fact that the number of large units in 1920 was just 29 with a total investment of Rs50m, giving employment to only 17,000. By 1944, it had risen to 605 units employing 28,000 records. Since then, the 78,000 people. Since then, the public sector giants have omerged and are growing, as are the ver large and small units in the private sector whose plants helch smoke inside and on the outskirts of a growing and now sprawling Bangalore.

and small-scale units from the private sector, have converted trial numover of Karnataka had. Bangalore from a somewhat sleepy "garden city" to a major husiness centre where modern problems such as pollution are heginning to emerge.

Bangalore owes its growing importance partly to the fact that it is the capital of an acknoweldged progressive and others. By 1975-76, the industrial numover of Karnataka had reached Rs8.5bn and estimates are that it must be over Rs10hn now. Of this, a total investment of Rs3hn has come helween 1972-73 and 1970, a period that added 119,705 people to the industrial workforce.

The Government has conclosed industrial

clously promoted State. Like other States in India Fresh investment in the small-where hureaucracy rules scale sector in this period was about Rs750m and there are now just under 20,000 small units registered in Karnataka although, like the rest of the country, not all are doing what was hoped of them.

Even more striking is the growth of sucillaries: Karnataka accounts for nearly 50, per cent of the new ancillary units in the country in the 1970s, partly total. But it has exploited its because the public sector giants abundant natural resources such and partly hecause progressive manganese, units like the Mysore Paper

couraged their growth

Also helping them are such institutions as the Karnataka and the Indian Scientific Satel
State Financial Corporation, the lite Project. Mills have deliberately couraged their growth. Karnataka State Industrial Investment and Development Corporation, Karnetaka Small

Industries Development Corporation, Karnataka Industrial Mysore Sales International and hosts of others. Together, they encourage entrepreneurs by providing con-

cessional finance, underwriting public issues, preparing project reports, making technoeconomic studies and helping to establish industrial estates and sheds. Mini industrial estates are an integral part of Banga-lore's business life. The Peenya industrial estate located there, is the largest in the country. An indication of Bangalore's

importance is the share of its exports. It maintains its traditional exports (coffee, sandal-wood products and so on) and to these have been added modern sophisticated engineering and electronic items. Exports increased from Rs 460m in 1971-72 to Rs 1.06bn in 1975-76. Once the Kndremuki iron ore exports get going the figure will swell significantly.

Exports have been helped by agencies specially created for the purpose—such as the Coffee Board and the Central Silk Board—and Bangalore has now heen put on the air carge map by the opening of an air cargo

Growth has been helped hy the location of a number of key research institutions which improve products and halp entre preneurs to gain access to mod-ern technology. Some hava come up due to defence requirements to help the many ordnance factories. But also in Bangalore are the National Aeronautical

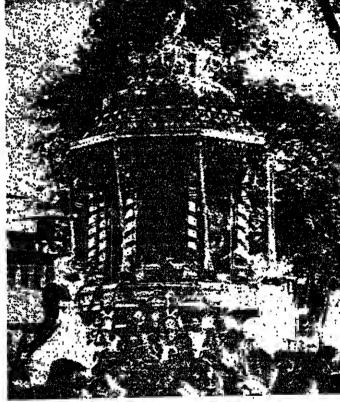
For example, the Central Food Technological Research Institute, Mysore, develops and prevides knowhow for the industrial use of a number of Development Board, items in the food industries. In the past 25 years it has developed about 120 products for which technology has been made available to Indian indus-

Bangalore thus has a number of advantages, natural and man-made. But it has its share of troubles. Inevitably, like the rest of the country, business-men complain of infrastructural constraints. Unavoidably, power heads the list and cuts in sup-ply and load shedding are con-stant sources of irritation.

Businessmen also complain of other infrastructural hottle-necks such as the lack of pro-per rail transport (Karnataka has mostly metre gange, single-line tracks), narrow roads and the dalayed introduction of a rural development programme to provide support to industry. Remedial steps are being taken slowly. Yet Karnataka has an obviously growing importance and a numbar of new investment opportunities have been

identified. Among these is a commercial vehicles factory with a capacity of 50,000 vehicles a year, a heavy fabrication unit to manufacture wagons and cranes, a chemical equipment and dairy equipment fabrication unit. a tractor factory with a capacity of 10,006 tractors, high-precision investing casting units to cater to the neads of the public sector Hindusthan Aeronautics. and a host of others

K. K. Sharma



Religious procession in the streets of Bangalore

Scars of progress show in a Punjab town

LUDHIANA TOWN shows all the scars of rapid progress. The massive clock towar stands sentinel as a memorial to more sedate times while at all hours of the day and well past dusk a chaotic traffic jab crawls around.

There are glinting new trac-tors, overladen lorries that look as if they might give way at any moment in a pall of filthy exhaust smoke, whizzing hicycles, snarling motor cycles, straining huffalo carts, trotting tongas, and men sweating and grunting pushing carts laden with scrap. over the potholes.

There are the mingled smells of any Indian town, but there is also the dust of the Punjab and the acrid smoke of industry to add to the pollution, for Ludhiana is one of the success stories of India'e industrialisation. It long ago hurst beyond the seams of the sleepy agricultural market town of 20,000 it was when the British left, and indeed was until the mid-

clock tower is a profusion and tors going home. s confusion of tiny workshops, foundries, forges, wire works, motor car and cycle accessories accessories and cycle accessories and cycle accessories and under the shade of some higger factories, including hosiery and producing bicycles, sewing machines and electric fans. Ludhiana is also an exporting town in a considerable way as well and was a storybook success until recently. Now the factories are in difficulty be-

assired power to had held as a more and more day and six days a week " said Avinash Rai, a partner of Rita Mechanical Works which makes sewing machines. York Hosiery 18 were Mills said the cuts were 16 hours a day. But both factories have their own power generators, even though their use puts up fuel hills 23 The smaller workshops are harhit because they cannot afford their own generators.

The town presents a classic case of growth through small-scale units feeding into higger ones. It also shows the importance of a general well spread level of prosperity. Ludhiana lies at the heart of the Punjah agricultural area where the green revolution has been most successful and the farmers are the richest in India. Even in this year of drought and power cuts the irrigation canals, have ensured that the fields are full and green. At night the roads become clut-Along all the roads to the tered with a procession of trac-

Workplace

motor car and cycle acces— Many of the small workshops sories, tool makers, nestling are employed directly in carrying out orders for the higger ones. And at York Hosiery the that many of the 2,000 people the factory employs bring their own machines and we simply provide them factories, including hostery and textile makers, and factories managing directors, Balraj producing bicycles, sewing Kumar and G. C. Dhawan, said

Others still work from home cause of power shortages. Most and such workers may make up difficulties

rest of India as more and more cycle rickshaws are migrants from Uttar Pradesh and Bihar, other Indian states which have a surfeit of unemployment. Building workers are also typically migrant.

It is also easy for an outsider to notice flaws in the boom and the opportunity for improvement-apart from the need for the municipal and social-services to catch up.

For Hero Cycles, there could be an improvement in tech-nology. The machine is strong and sturdy, but it is an example of India huriding for developing countries. It is basically a heavy machine with few of the refinements such as gears and a lighting system, let alone fashionable design or fancy handlebars which have become standard in the West. For an importing country seeking a serviceable bicycle it is good, but the moment an importer gets richer or fancier ideas the Hero could be left behind.

For the Rita sewing machine company, exporting is a challenge. It is also a necessity as But even when Rita has produced the machines with all the

centre industrialists spoke of savage to Rs 50 a day, a large sum for reliability of raw materials, of rapid power cuts. "We only have India. To an extent the prosequence of the color of getting them out of India has presented problems. The naarest port. Bombay, is hundreds of miles away and there are conshipments.

Altogether, according to Mr. Rai, the owner, "Transport costs should he between 5 and 7 per cent of production, but taking into account congestion and delays and extra charges at the port they come to between 20 and 25 per cent. There is a need for a dry port somewhere in the region."

Delegation

For York hosiery, as for much of the fast-growing textile industry in Ludhiana, prosperity depends on the annual delegation from Moscow signing a big order. The Soviet Union takes more than 90 per cent of York's Rs 55m (£3m) annual production, as it takes a similar amount from other woollen mills in the town. So far everyone is happy.

The owners, Mr. Kumar and Mr. Dhawan, said: "Business increases by 5 to 10 per cent a year. They don't give us a chance to diversify to other markets." But it might be a matter of concern that one reason why York is so happy is that the Russians buy in hulk so the company does not have to worry about changes in fashion or whether it is merino or Fair Isle or Shetland or mohair which is the current favourite

Kevm Rafferty





Demands of the economy put pressure on railways

INDIA'S 8,000 steam loco over much longer distances, but . India's railways includa both motives may be a delight to the put extreme strain on rail and broad gauge and metre gauge ballmark of an ageing indostry equipped to cope with the extra and symbolic of an increasingly traffic. serious failure to meet the

Ona Westero economist who Ona Westero economist who and fertilisers was initiated by has recently studied India's rail the government to meet shorttransport problems explained: ages in the country, and most of "Overall, India has an efficient railway system by almost any criterion you care to mention; it fares well against any country in the wurld. It is just not big enough to cope with the demands the Indian economy is making nn it."

ages in the country, and most of these gunds had to be transcribed by rail.

The Board constantly complained that coal cargo—which accounts for about 30 per cent uf total traffic—included up to 25 per cent extraneous matter ask and and are are ask and and are country. making nn it."

Shortcomings bave been bighlighted this year by extreme pressures, some inevitable and some avoidable. But the net result is that India's Railway Board expects to make a loss in the current financial year of between Rs 500-600m. This is the first year in the red since 1975, and compares with profits lsst year of Rs 367m and in 1977-78 of Rs 1.26hn.

Tumbled

The basic reason for the slump into deficit is simple: traffic carried has tumbled from an expected 222m tonnes carried last year; and more than 210m tonnes carried in the two pre-

A number of peculiar factors bave clouded this year's per-formance. Severe cyclones in Andhra Pradesh last summer severed the country's north-south railway links, disrupting services for almost three months according to Mr. Manuel Menezes, the Board's chairman.

There was also severe labour trouble in West Bengal and Bihar, which originates about 50 per cent of the railway sytem's traffic, most of it coal. At the same time, hundreds of

wagons were trapped during disputes in the coalfields, and in places lika Calcutta port.

Labour disputes, in the country's major ports, coupled with severe congestion in Bombar the largest south in the largest south severe congestion in Bombar the largest severe congestion i bay, the largest port, immobilised further wagons and trapped import cargoes at the dockside. Many shippers attempted to sidestep the strike-bound ports by unloading else-

train - spotting road networks around minor enthusiasts, hut they are the ports which were inadequately Trains travelling on metre

When the ports were operatdemands this rapidly growing industrial nation makes on it.

which provided extra problems because a heavy import programme of steel, coal cement programme of steel, coal cement it.

> -ash, sand and stones and so on. If coal was washed at the pithead before loading, the Board insists this would have provided considerable relief to their overstretched resources.

As all these problems were compounded, so there was an acute shortage of wagons and a vicious circle of hold-ups huilt up. Coal industry spokesmen claim that the wagon shortage was so great at one stage that 14m tonnes of coal stocks hullt up while industries throughout the country were crying out for

In addition, there was a real fall in rail cargo from factories as industrial stagnation settled on the country. There has been an estimated 4 per cent fall in industrial output in 1970-80. There was also a fall in export demand for iron ore. Between them, all these difficulties affected traffic volume over the

Problems were aggravated by declining efficiency on the railways. Train turn-round times deteriorated from an average 13 days to 15.6 days during the year. Punctuality—measured as the number of trains that leave and arrive on time—fell at one point to 82 per cent. It bas since recovered to 89 per

Some of the extra strains on the railway system no donbt can be accounted for by the fact that the average length of freight journeys increased by 3 per cent to 743 kms. This was in part due to long hauls of coal from the eastern coalfields in West Bengal down to Mahabound ports by unloading else rashtra and Gujerat, and of where. This not only meant grain from the Punjah to that imports had to be carried Hayana and Kerala. track, which creates inefficiences

gauge have to travel more slowly and cannot carry such large loads. Time is also lost in trans-shipping cargoes from trains of the main broad-gauge tracks to metre-gauge trains. Frurteen major routes are currently being converted to broadgauge track.

More than 8,000 of India's

11,000 locomotives are steam-powered. There are 20,000 diesel trains, and the railway Board has only 1,000 electric-powered trains, which are considerably more efficient to run. Foreign experts calculate that freight cost using electric trains are less than half those of steam

Still running

Steam trains have not been built in India since 1971, hut Mr. Menezes predicts that many of these will still be running by the turn of the century. The Railway Board cannot afford to replace them at a faster rate,

carried long distances by road.
Almost 25m tonnes—about a
quarter of total production will have been carried by road this year.

But road transport costs are alarmingly high—between six and 10 times those of transport by rail. Economists calculate that while the railways are capable of carrying 50,000 tonnes a day, the best that can be expected of road is 3,000

The railways can improve

their performance on a small scale by reducing turnround time and increasing the rate at which wagons are loaded particularly coal wagons. Between November and midloaded every day. A directive from government to improve this bas raised daily loading to an average of 9,500. Thermal power stations, in urgent need

of extra coal, have in the past month received an average of 3,600 wagnns per day, compared

previous months. Power station tonnes a year-about 60 per cent stocks have doubled in the past month to 150,000 tonnes.

productivity has been reported for oil. While loading bas stayed steady at 1,600 wagons a all fast, then the railways just day, loads have been carried an bave to he improved. Otherday, loads have been carried an bave to he improved. Other-average 20 per cent further in wise, the situation is going to the same time—about 750 kms. dateriorate from serious to

is closely linked to a new productivity-linked honus schema agreed with the railway unions late last year which will cost the Railway board about Rs 370m. Industrial relations are certainly much improved from last summer, whan a long go-slow nibbled away at production.

While these changes can bring some gains, foreign experts believe that the only long-term solution lies in heavy investment and, most crucially, electrification. One anthority said: "Electrification is the single most important factor in improving India's railway system. Everything else will provide only temporary and marginal relief.

"While India is a huge

All of these problems would country, its transport problems not be so crucial if India's road are not so complex. You just system were better. As coal need much more of the same shortages have become critical, more trains, more wagons, more and more coal bas been In the end you bave just got to In the end you bave just got to take a deep hreath and go ahaad and make the investment."

At present, less than 8 per cent of India's 61,000 kms of railway track is electrified, so there is a long way to go before even all the major routes are converted. ... The Government allutted Rs 6.5bn fur capital in-vestment in 1979-80, but there is no certainty that this will be

Investment levels

There was an estimated shortbut only 13,000 new ones wera brought into operation, all of February, an average of just ally. Investment levels will bave 8,600 wagons of coal were being to be hoisted a long way to breach this gap. The World Bank has agreed a

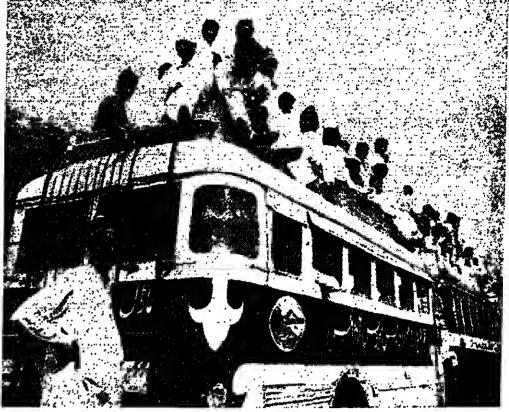
loan of \$190m for railway modernisation, which will be of considerable belp. But little of this cash is likely to he spent by the Government and power arriborities to anticipate the

. India's railways includa both with about 3,000 in the four to carry in the region of 320m more than is carried at present. nonth to 150,000 tonnes. Of this, 35 per cent is likely to A similar improvement in be coal and 14 per cent steel. One foreign expert predicted: "If the economy is to grow at

dateriorate from serious to

"It will take some time before current investment pays any dividands, so in the meanwhile they will have to do what they can by improving labour efficiency, reducing turnround times and trimming the average length of journeys. Basically, tha country is going to be very hard-pressed for at least three or

David Dodwell



Overcrowded public transport, like the buses pictured above, means that as many passengers travel on the roof as inside

Chronic power shortage costs industry dear

SOMEONE HAS switched the lights out on Indian industry. As power shortages have become endemic, so the suthorities are beginning to count the cost, and reliance on electricity has they estimate that erratic power grown" — about 10 per cent a supplies are costing industry year since 1950. India's power about \$3.5bn a year.

With electricity supplies fall-ing short of demand by about 20 per cent, every sector has suffered. Coal mines, steel plants, fertiliser factories, m hit, as diesel generators installed to bypass power cuts bave been starved of fuel.

Power shortages bave been a fact of life in India for at least in the near future.

By 1982 the railways will bave rapidly growing demand.

in a recent report nn India's power industry, talked of "the exceptional rate at which generation has grown at an annual rate of 5 per cent, which would be reasonable in many countries, but clearly is insuffi

cient in India.

Many blame the current extreme shortage on monsoon fact, every area of industry bas extreme shortage on monsoon been disrupted. Farmers have failure in 1979, which has hit in parts been rationed to four hydro-electric power output. bours of electricity a day, and bouseholds — where they have in bydro-electric output is a electricity at all—have suffared marginal problem which comes similar black-outs. Even tourists on top of a more structural in exclusive botels, such as the Grand in Calcutta, bave been mal power," said one independent expert. Only Kerela and Orissa have

anything like normal supplies of power. Elsewhere cuts vary from 8 per cent in Gujerat, to 100 per cent for 7-15 days a mouth for industry in Uttar Pradesh. In recent weeks, the three states of West Bengal, Rajasthan and Mahareshtra bave

try has been closed down, with 6m tonnes of coal output was domestic users limited to lost through power cuts in the between 8-17 hours of power 2 nine months to January 1980. day. At the end of February, the West Bengal government for a period of three days and power supplies have been

Mines closed.

While heavy power users like steel, fertiliser and cement plants have been particularly hard hit, West Beogal's coal industry is perhaps the most crucial casualty. In the eastern coalfields, three mines have been closed in the Ranigani area. Most mines face cuts of at least six hours a day.

During last summer's monsmms, about one sixth of all coal mines in India were closed because power cuts made it impossible to pump ont water. The situation is likely to be even worse in the coming year unless power supply improves.

In the three months ahead problems are likely to be comwill be using large amounts of electricity to pump water to crups growing in the fields, and

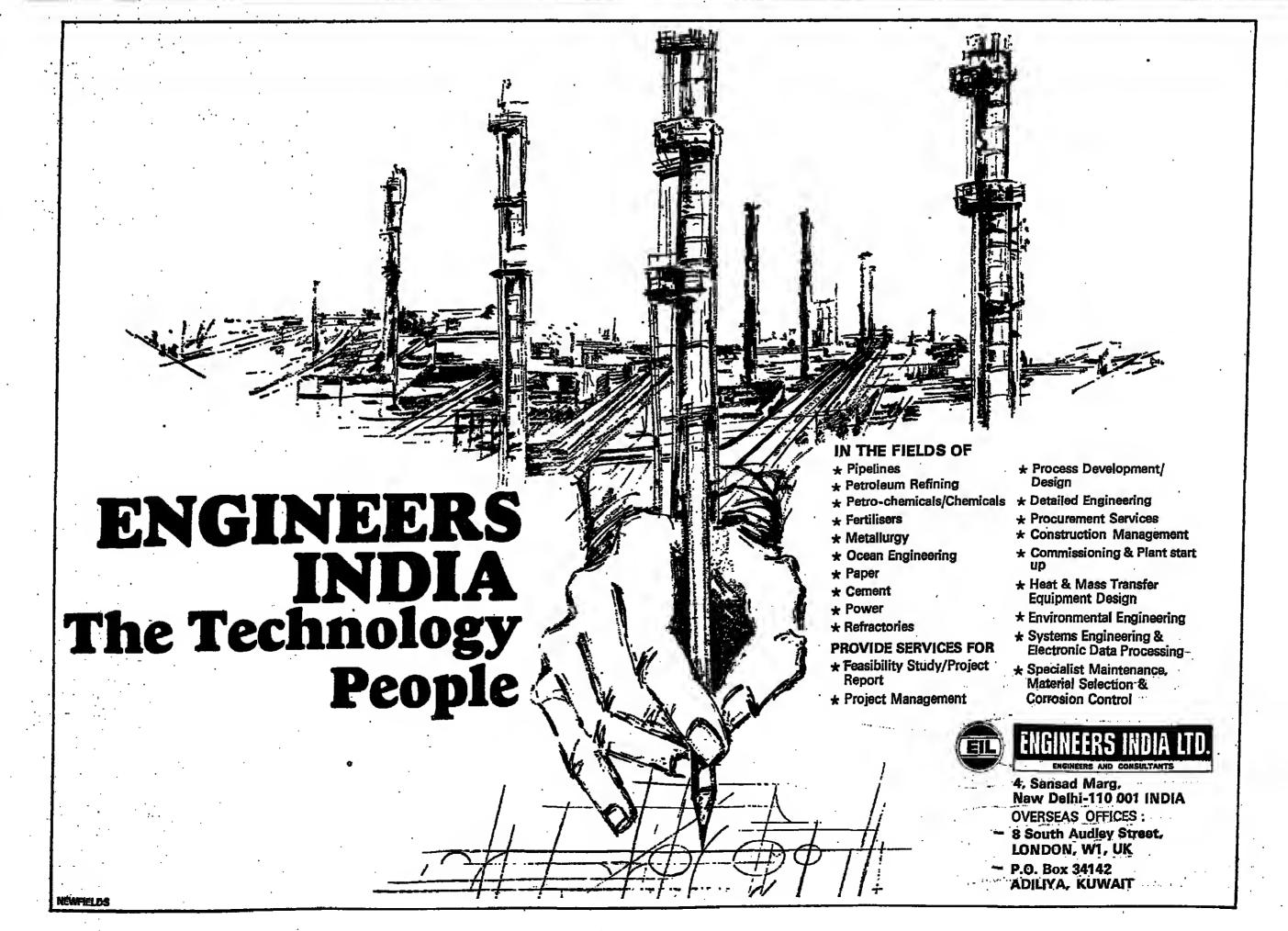
second because hydro-electric

power is unlikely to rally until

the next monsoons arrive.

In the past, large companies bave been able to override power shortages by installing their own "captive" diesel generators. But a critical shortage of diesel fuel has now closed this "escape route." An execu-tive in a multi-national electrical company admitted that about 15 per cent of output had been lost in the past year, even with diese power used as a back-up. His company is probably typical of large companies, while smaller factories without any diesel back-up are losing between 30 to 40 per cent.

As a stop-gap measure, the CONTINUED ON NEXT PAGE





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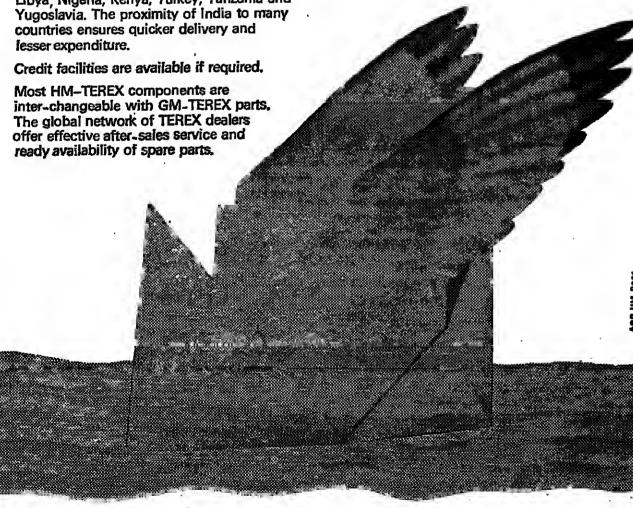




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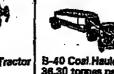














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Import programme puts strain on ports

CONGESTION IN India's portsis costing the country dearly, not just in lost exports and delayed imports, but in penalties and surcharges imposed on shippers. In 1979, an estimated Rs 10bn (£549m) was lost in shipping surcharges, demurrage costs and export losses. In a three-month strike at Calcutta port early last year, Rs 900m was lost in jute exports alone.

As the country sets out to As the country sets out to encourage a more liberal import policy, so there is an urgent need to boost port capacity and reduce delays. Talk of new investment in ageing ports such as Bombay, and in a number of newer ports is widespread, but detailed policies are still awaited.

Total traffic passing through

Total traffic passing through India's ports rose by 12 per cent in 1979 to over 70m tonnes and was worth Rs 1200n. But was worth Rs 1200n. But Bombay, the country's busiest port, bandling around 16m tonnes e year, was bopelessly congested. In November last year, 18 ships were waiting to berth, and the average waiting time was 41 days. The backlog has now been cut to three ships, and waiting time to about 10 days.

The position has been little better in Calcutta, where 24 ships were waiting outside the snips were warring ducate the port in November, with an average waiting time of 26 days. This backlog has also been trimmed back so that only five

sblps are now waiting.
Dr. Snbrata Ray, director of planning and research at the Bomhay Port Trust, explained bow a 12-day strike in May 1977 started with just two ships waiting and ended with 44: "We have never really managed to make up the backlog since then," be said.

The mefficiency in Indian ports is no donbt one of the reasons why one strike can bave such long-term consequences. While in many countries, ships expect to be unloaded at a rata of 2,500 tonnes a day, in India, the average is 200 tonnes. Low productivity means that in Calcutta, the cost of handling cargo now averages rupees 145 a tonne—Bombay, which averages R23, is far from cheap.

Severe strain

A heavy import programme of essential commodities has also put severe strain on the country's ports. More than 18m tonnes of oil bave been imported in the past year, while shortcomings in the country's coal industry bave meant the import of 1.5m tonnes of coking coal, and millions of tonnes of steel, fertilisers and cement.

vestigating the workings of years. India's ports nevertheless If mechanical loading methods asserts that there is no basic were used, the port could shift under-capacity in the country. in an hour what currently takes He claims that only Bombay is genuinely inundated with more traffic than it is equipped to

years ago, and has barely changed since. A tremendous explosion which destroyed a large area of the port in 1944 was passed over as an opportunity to enlarge or modernise it. It now bas 45 berths, just seven in of them added since the first of them added since the first Calcutta port has problems of steam ships arrived in 1873.

A large proportion of its port, it is separated from the traffic consists of bulk cargo: Bay of Bengal by more than 50



products, and exported sugar, oilcakes, iron and steel. Textiles, angineering products and angineering products marine products make up a

smaller proportion of exports. In many countries, these bulk cargoes bave long since been containarised. Indeed, Bombay is the country's leading container port, bandling around 39,000 tonnes last year. But this accounts for only a fraction of Bombay's bulk traffic, and by all accounts the port is bope-lessly ill-equipped to cope with containers.

It has no gantry cranes, and since no inland customs depots since no inland customs depots yet exist, containers have to be packed on the dockside. Experts claim container ports need beween 25 and 30 acres along the dockside for stacking, but Bombay has just a quarter of this area. Even port trust officials admit that container loading can be chaotic.

steel, fertilisers and cement. which displace workers. For At the same time, iron ore this reason, a fertiliser dock exports, mostly to Japan, re- with four high-capacity 13 tonne main about 18m tonnes a year. cranes worth a total of Rs 11m

A foreign economist in bave been lying idle for three

> lift trucks are scarce, and most mobile cranes date back to the early 1960s.

> Dr. Subrata Ray concedes that most of the warehouses are in such urgent need of demolition that they will soon collapse of their own acord. Yet he claims that the port is working so bard that work of this kind is impossible

from the problems of obsoles-

Unlike Bombay, which is an intermediate port, Calcutta was a terminal for the beavy trade in tea and jute. It is still a major terminal port, though its leading exports are now coal and general cargo, and it main imports are oil and fertiliser.

At one time, Calcutta handled 55 per cent of India's trade. With traffic now averaging 8m tonnes a year, it now carries barely more than 10 per cent. The port is plagued by siting and many modern ships are too

and many modern ships are too large to weave up the Hooghly River. Its productivity is appalling and, as a declining port, more than 3,000 of its 70,000 employees are now superfluous. This is no doubt one reason for the port's appalling labour record. In the year to November 1979, strikes halted work at the port for no fewer than 150 days. More than 100,000 man-days were lost, and more than 4,000 ship-days were lost as ships waited for herths. By comparison, Bombay lost only 23,000 son, Bombay lost only 23,000 man-days, though severe congestion meant 4,500 ship-days were lost.

Union rivalry

One of the main reasons for this discrepancy is the differ-ence in trade union structures at the two ports. In Bombay. there are only three unions, and of these the Hid Mazdoor Sava is by far the most dominant. By contrast, Calcutta's unions are much more numerous, and none is permanently dominant. Interunion rivairy, rather then conflict between management and workers, is often the root cause of strikes, go-slows and other

Mr. R. H. MacDonald d'Silva, deputy chairman of the Calcutta Port Trust, complained: "Because of the politicisation of the imported fertilisers, fertiliser miles of "bars. bores and unions, whether you like it or raw materials, vegetable oil, bends" along the Hoogbly not you end up playing one crude oil and petroleum River. Like Bombay, it suffers group off against another."

is in the ascendant at a particular time, certain unions can always expect backing from State or Federal Government. Madras port suffers from inter-union rivalries of a kind similar

problems, shippers have recently imposed penal congestion surcharges on Indian ports. After rising briefly to 50 per cent in the middle of last year, the surcharge at Bombay is still 25 per cent. In Calcutta and Madras it is 30 per cent. An improvement in labour relations and productivity since Mrs. Gandhi's general election victory has led India's abipping bosses to press the foreign con-

ferences to trim surcharges back to 10 per cent, but no answer has yet been received. Calcutta's new port at Haldla bas been operating since 1977, with a modern container terminal and an oil jetty. But it has never worked at a frac-tion of its capacity, mainly railways and roads linking it to Calcutta and its hinteriand has still to be developed. The railways are planning to start building container wagons, while three inland container depots are to be built. All of this will belp to boost India's rudimentary container handling

capacity.
India's other main ports suffer from similar infrastructural limitations, which means they bave never easily been able to cope with traffic spilling over

from Bombay and Calcutta.
While Madras port bas now been given the go-ahead for a containerport—India's third—it is still mainly equipped for the export of iron ore. Both Madras and Visakhapatnam (often called Vizag) bave equipment to bandle 6.000 tonnes of ore an bonr. Ports in Goa and at Paradip between them clear of it going to japan, but there are still severe limitations on their ability to handle other

cargos.
In view of these limitations. Mrs. Gandhi's new Congress.
Government seems to have given the green light to plans for a new port at Bombay.
Plans for this port, at Nhava Sbeva bave existed since 1965. The new port would handle containers, bulk cargo, and modern vessels with a draught too deep for Bombay, releasing the main port for general cargo. When the plan was first moofed, the port would have cost Rs 400m, while the estimated

cost now exceeds Rs 1.8hn. also doubled its budget for capital spending in the ports to Rs 80bn, with the lion's share going to Bombay. This will allow the introduction of modern machinery, provided trade unions do not dig in their

heels.
With the caveat that labour relations are still a long way from improving, independent experts believe India's port congestion problems can be solved ouite quickly. One official said: "The ports' problems are such that a simple dose of heavy investment. investment and improved management methods will solve most of them."

Whether the new government

manages to dispense either of these "simple doses" bas yet to be seen.

David Dodwe!!

Power CONTINUED FROM PREVIOUS PAGE

months of contracts being at the moment, out of a capacity signed, and bave provided some short-term relief. But with the rising price of diesel, these sets may prova an expensive way of adding to the state's power-generating capacity. Private companies acknowledge that their hastily-installed diesel generators provide very expensive power, but one executive noted ruefully: "Expensive power is not so expensive as no

The main reason for the power shortage is low capacity utilisation from the thermal power plants, which supply 55 per cent of the country's power. Output from them has never bettered 55 per cent of capacity (Britain's power stations average 75 per cent, while the private Indian power plant run by Tata has consistently produced 85 per cent of its capacity). At present, India's power plants average 48 per cent capacity ntilisation.

But output varies widely.
West Bengal's Santaldih plant,
which The Times of India
recently described as "a byword for inefficiency and mismanagement," has avereged disrupt output. Allegations of agout 30 per cent. The Damodar gansterism, or simple sabotage Valley Corporation (DVC) in of machinery, are often made.

Bihar, which supplies West Industrial relations between
Bengal and large parts of the management and workers are coal fields, bas an installed capa-city of 1,450 MW, but in the few signs that conflict will past year has naver produced decline.

Breakdowns

The power authorities often blame low output on frequent plant breakdowns, and claim that the generating sets-most of them supplied by the Bharat Heavy Electricals (BHEL) are unreliable. There is a degree of truth in

these claims, but one indepen-dent energy expert noted: "Output from BHEL sets ranges from 25 to 80 per cent of capacity I suspect the variation is closely linked with the quality of maintenance." Coal supplies have also given

the power companies a number of headaches. Supplies have arrived erratically, sometimes leaving the stations with only two or three days of atocks. Coal quality is also poor, since it often contains large quantities of ash as well as sand, stones and other extraneous matter.

This puts severe strain on boilers, and inevitably leads to premature breakdowns. · Labour disputes also severely

Pradesh, Ramagundam in Andhra Predesh Korba in Madhya Predesh and Farakka

Between them, thesa plants ahould provide extra capacity of 7,200 MW, but none will come on line before 1982. Funds worth \$600m from the World Bank and \$418m from the OPEC special fund have been provided for these plants.

The Government announced just a week ago that it is pre-pared to invite private com-panies to build and operate has in the past concentrated its power stations in future, selling their power to the state electricapacity, at the expeose of city boards for distribution. It improving distribution. This is boped that a dose of private imbalance will have to be enterprise will perk up efficiency corrected before further areas as well as total output.

It is also likely that foreign companies will contribute to India's villages are supplied improving power production. With electricity).

The visit of a West German India's electricity grid is also team, briefed to analyse the country's output problems, has attracted public attention.

The Government is also likely to boost bydro-electric power— there is thought to be potential for about 66,000 MW in India. Only about 10,000 MW is currently produced by hydroelectric stations, but a further 10.000 MW bas been com-

Total installed capacity at present is about 30,000 MW, and another 18,500 MW should be past year has naver produced decline.

After a degree of government additional capacity, 3,000 MW

The coalfields, which are supparalysis during 1979, Mrs. will be ready by the end of the posed to receive 250 MW a day, Gandhi's emphatically elected current financial year, with get an average of 140 MW.

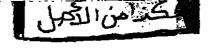
Congress government has wasted 2,000 MW planned for 1980-81

West Bengal state electricity board recently imported five 95 MW. has had to make do what problems it can New 101 200 MW gas turbine sets from John Brown of England. The sets were installed within seven sets were installed within seven at the moment, out of a capacity at the moment at the mom future, partly for political reasons of political sensitivity. But there are indigenous supplies of uranium—an estimated 20,000 tonnes of yellow cake fuel. India also bas the world's largest supplies of thorium, another nuclear fuel (an estimated 450,000 tonnes).

Another means of boosting power output is to reduce transmission and distribution losses, has in the past concentrated its resources on increasing power of the country are provided with electricity (just 40 per cent of

India's electricity grid is also still rudimentary, and there is no real hope of improving the grid system in the near future. The grid network is expected to grow slowly, probably only wben states have a basic surplus

of supply.
Since most of these Governmental plans to ease the power shortage are likely to take two years or more to bring relief. it seems the best thing India can do is pray for rain. If the monsoon is good, then the pressure will be eased. If it is not. then belts will have to be tightened still further, no matter what the cost to the economy.



Shipping emerges from cash-flow problems

country. With falling freight in wages and dockside facilities. 31. there have been inevitable cashflow problems. But the signs both the private and public To make matters worse, the are that the industry is now emerging from this trauma, and in a reasonably healthy position.

It would appear that income from shipping is now rising and not easy. India has not bad to a 28 per cent rise in rates on one lay ships up as other countries important conference, covering the UK and contin-ental Europe, should do a lot five years — but then its fleet to help sorely-pressed balances back into the black.

In addition, a much-needed management restructuring of the State-owned Shipping Cor-poration of India, which accounts for just over 51 per cent of the country's fleet, ia tion has been commercially is slow, adding to port charges.

THE WORLD crisis in shipping having beneficial effects. It disastrous. When the vessels THE WORLD crisis in shipping having beneficial effects. It disastrous. When the vessels There are ships flying the told the annual meeting that the over the past five or six years begins to look as though the were ordered there was no port Indian flag that can handle 1,500 ports were saddled with probhas hit India aa hard as any corporation, after increasing in the country that could losses in the past two years, accommodate them. They were rates and rising costs, especially may get back into pront in the financial year ending on March when rates had dropped alarmmay get back into profit in the

> sectors, is to win sufficient freight to remain profitable. In world where ships increasingly are being laid up this ia that have - the State corporation is much smaller and confined to the sort of vessels which have been able to weather the economic problems rather more

> > Crude Carriers and their opera-

put out on charter at a time ingly and the result was that refineries they were intended to serve were not ready anyway by the time the vessels had been

Too little spent

India also has two large oil/ bulk/ore carriers but there are no ports which can really handle these either.

Port problems are one of the been able to weather the eco-nomic problems rather more successfully.

It has only two Very Large

factors which militate against the development of a modern fleet. Too little has been spent on port infrastructure in recent

tons a shift. But there is no bandling equivalent at any antiquated cargo a slowing in unloading is delays in turnround. another factor pushing up costs.

Government recognises this

six out of the country's 10 major carriers are modern, nice out of ports are working beyond capacity, which has limited the amount of goods that can be handled.

The problem the Government has to overcome was described by Mr. V. D. Chowgule, ohairman of the All India Shippers' Council, last autumn when he

Indian port which can move machinery, low productivity, goods at this landed rate. Such high occupancy berth rate and

There are signs that the help overcome the dockside problems investment in new problem. It has just decided to vessels will go aome way to pro-spend at least £45m on develop- ducing a more modern fleet. lng ports, twice the present India's fleet is not noticeably up year's allocation. The Government has almost were built before 1970; of 73 certainly been influenced in its cargo liners 43 were built before decision by the knowledge that that year. Only the combination 12 having been built in the last decade.

The nationalised corporation is doing something about this via a blg order programme. It has 21 vessels of 380,000 dwt under construction in world yards. Six have been placed in Britain, at Sunderland Ship-builders. Six more are in Poland, four in Yugoslavia, three in East Germany and three at home in India.

All the foreign-placed orders are for cargo liners but the Indian ones are for a bulk carrier from the Cochin yard, a 76,600 dwt ship, a small 4,489ton passenger-cargo from the Mazgaon dock in Bombay, and three cargo vessels from the Hindustan Shipyard, totalling 50,100 dwt, at Visakhapatnam.

The shipping industry took a significant atep to update its facilities in September, 1978, with the introduction of the first container service. That it should have taken so long after their inauguration in the rest the Japanese bombed Pearl of the world is a commentary Harbour, and specialised in on India's development of

modern commercial practices.
The first service was a monthly one between the country's west coast and Australia, Since then destinations in Europe, the Soviet Union and Japan bave been

come into service India will then phase out many of its older cargo shipa,

What India would also like to do Is to bring its manpower requirements into line with introduced elsewhere. India is profligate in the use of expectedly, of course, in a country with such a vast popnlation and such enormoua employment problems. India casts envious eyes at

but little has happened. Government is not

India's other shipping fleet: dhows tied up in Bombay harbour been passed which cuts off aid unaware of all these problems visions to companies which employ more than 22 crew in certain and is thought to be not un- market conditions. sympathetic towards them. Last the previous Janata carry a crew of between 60 and administration set up a committee under Dr. R. M. 70 where other countries man-

However, the shipowner does have the very real advantage that he can get cheap credit from the Shipping Develop-ment Fund to build his vessels. Both in the private and public sectors money is available at 41 per cent over 20 years, a considerable advantage over commercial rates charged almost everywhere else outside the Communist bloc countries.

age with about 25. -

One thing that all the intereated parties would like is a stricter enforcement of the guideline laid down by the United Nations Committee on Trade and Development that freight should be carried on a 40:40:20 basis—that la, 40 per cent carried in vessels of the country selling the goods, 40 per cent in vessels of the country buying them and the rest in third-country ships. Several representations have been made to the Government

chicf Honaver, adviser to the Government, to look into the wbole field of shipping.

Careful scrutiny

An interim report, published in September, suggested that careful scrutiny abould be made of all applications for loans from the Shipping Development Fund, that there should be curhs on the dividends paid by shipping companies, that a debt-asset ratio should be introduced and that there should be a special fuod for depreciation to free companies from having to make provision out of revenue.

The dividend limitation suggestion has naturally aroused considerable controversy. Dr. Honaver claimed that companies had not followed a rational dividend distribution policy because they had pald wbat it described as exorbitant dividends when profits were high and had made few pro-

The second part Honaver report should be published before long. Congress Party administration now has the matter to deal with because the Janata Government took no action on the initial findings. It may he several months before the industry gets any guidance from the Government about wbether it accepts, and intends to implement, any

of the findings. For a country which is small terms—India in shipping cent of world tonnage last July
—great advances have been made. The fleet has grown in every year since Independence, and a great review of requirements is going on within the

various companies, India is asking itself what its future requirements will be how they can be met and what ships will be needed to meet likely to be an increasing move towards container traffic, and more product carriers. For a small shipping nation this is a healthy approach to a difficult

problem. Anthony Moreton

Putting the State in profit

PROFILE: REAR ADMIRAL KRISHNAN DEV

FROM HIS office on the 16th school. Who knows?" floor of the headquarters of the Shipping Corporation of India, Rear Admiral Krishan Dev bas a commanding view of the Malabar Hill across Bombay'a owned corporation owns 52 per Back Bay. It is a view he will cent of India's shipping and he not bave for much longer. He is 60 at the end of the year and lapse of world shipping after the then he will retire as vice-chair- 1974 oil crisis. man and managing director of the corporation.

What will be do? "I don't know. After the steel industry this is the largest investment in the country. So there is nothing bigger to entice me.

"Anyway, I work ten bours a day and I really bave no ambi-tion. When I came bere, the corporation was losing money and will leave it a profitable concern. The same thing happened in my last job when I was chairman and managing director of the state shipyard at Garden Reach.. outside Calcutta. I turned it round to profitability

"So there is nothing in busi-

Admiral Dev bas been with and sell aggressively. the shipping corporation for nearly three years. It bas been arrived in the wake of the col-

"They have been very difficult years for shipping but I am contented because the Indian shipping industry is looking up. We suffer from over-manning, I admit, In spite of this, wages in the industry are as good as any in the country."

Hard sell

If he has any regrets it is that Britain is contributing too little to the growb of the Indian

"Do you know, Britain is the only country not to bave a about chamber of commerce here in seas. Bombay? There is an IndoFrench chamber, an IndoGerman one and a lot of others, bome. It is so for most Indians." ness to attract me. Perhaps I but no British-you leave it all will do something completely to agents. But this is a very Bombay in the early 1930s as a different — ran a little primary hard, competitive world. You boy of 13. He was born and

need to come out bere and push and sell aggressively. brought up in Lahore, in what is now Pakistan, and spent "When President Giscard was nearly all bis adult years in the "When President Giscard was

in Delhi for the Republic Day a difficult period. The State celebrations in January, be flew owned corporation owns 52 per down to Bombay specially to attend a dinner for 300 businessmen. He was very impressive. He made an excellent speech in English, spelling out what France could do for India. It makes me sad to think how little Britain does. I have six sbips on order in British yards and when I visited them they were most helpful. But there were no follow-up visits out bere."

> Admiral Dev is convinced Britain is looking too much towards Europe when she should be paying more attention to a market in which she has all the natural advantages bistory, language, connections. There is more news about Britaln here in the papers than about any other country over-

Admiral Dev first came to

Indian Navy. He joined in logistics during hia service

Part of his service was spent in London as deputy naval adviser at the High Commission and during 1958-59 he attended the National Defence College at Latimer, Bucks. He recollects added. Future plans envisage with relisb the Westbury Hotel an extension to the U.S. north in London's Mayfair ("so con-Atlantic coast and the Great in London's Mayfair ("so convenient") and a speech by Mr.
Denis Healey, then Opposition
spokesman on Defence, when be was at Latimer ("such a good politician"),

As the lights come on In the tower blocks on Malabar Hill and dusk falls on Bombay, Admiral Dev turns back to his desk. But not for long. Next year bis time will be his own. His philosphoy though is a simple one. "I have enough to live on. When I've had my two meals a day, what more could

Anthony Moreton Japan where a law has recently



India's largest paper manufacturing plant gets ready to go on stream



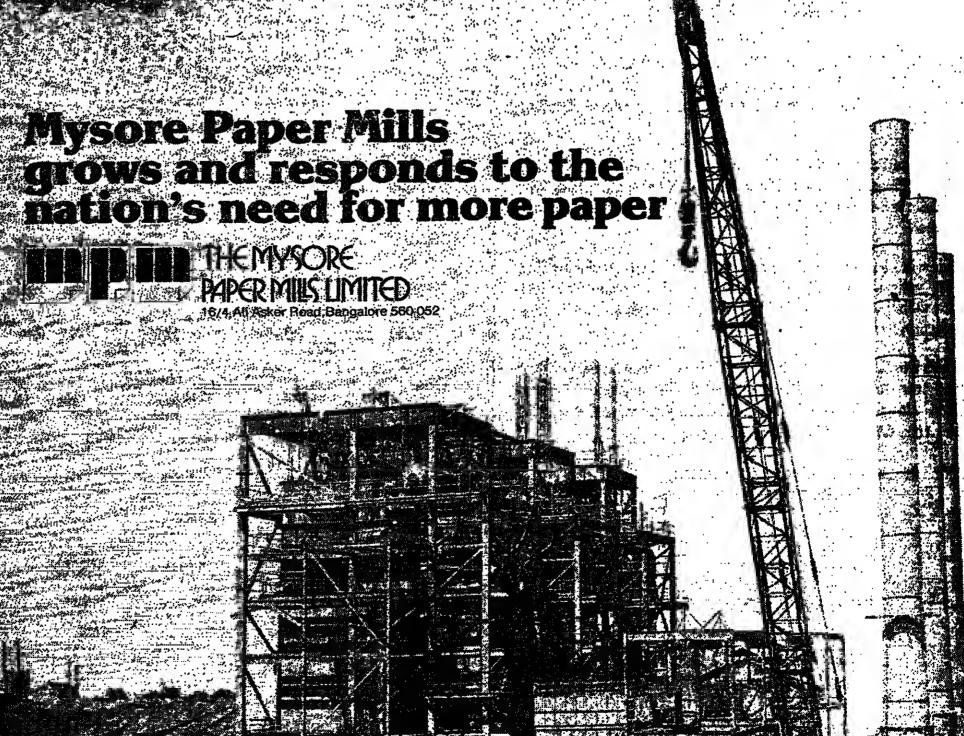
packaging paper

By the mid-eighties, from a annual regularization for paper would have arown to retearly 2 million farmes in response to that demand for more paper MPM has planned and executed for the eating, a massive expansion at a cost of over Rs 1,000 million baking its capacity to 122,000 townes per arithm including 75,000 townes of newsprine indeed light solved and diversified to test passed and users consider which in the next lew years will object of a 75,000 acres scientifically managed captive plantation an auxiliary sugar factory. Which will provide bagasse, a bijemical raw materials conclex: a fully equipped solbisticated entities disparate plantation workshop. With the active backing distriction workshop, which has active backing distriction workshop. With the active backing distriction workshop, which has a covernments of priding and Kometausgener manced by a cooscipling of foliogist papers. See by Chemical Sank New York and Earnes of Montreel and Judges. institutions and Banks led by IDBI and Sta of India. MPM thus enters the new debide

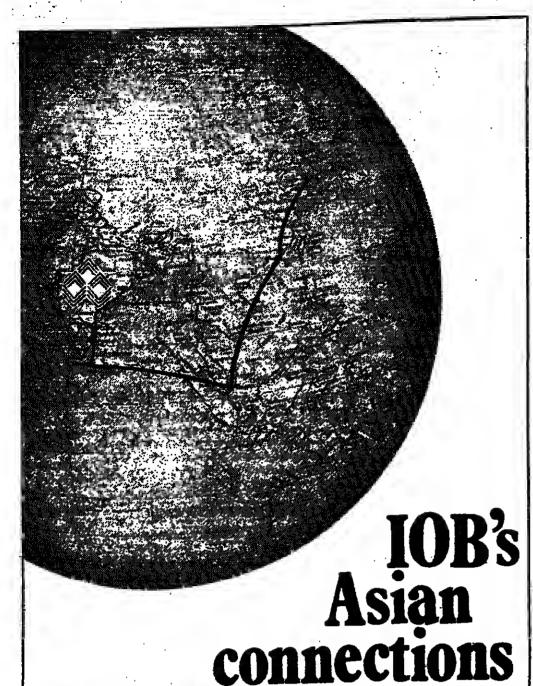
the best technology available in the world to conceive develop and establish midra's largest. daper menufacturing unit in any single location.

MPM is poised to deploy this experience and expertise in other locations and, in perticular, in

The sompotent torests of the Maintag region of tedas State of Karnataka need wait only a little longer the sounds of this industrial giant will approximate the sounds of this industrial giant will approximate the sounds. awaken them. By mid-1980, MPM's mammoth.







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Coal reserves are vital

THE Black Diamond Express, which leaves Calcutta's teeming Howrah Station daily at dawn; is full of earnest and intense businessmen sitting in spartan and grimy first-class carriages. Most are beaded for Dhanbad at the beart of India's richest coalfields-and at the heart of the

RAW MATERIALS/AGRICULTURE

fields—and at the heart of the country's economic problems.

Since the oil price rises of 1974, India's businessmen have bad no doubt that the only sure route to steady economic growth lies with rapid exploitation of the country's huge coal reserves. The latest round of oil price increases, which has hoisted the estimated oil bill for 1979-80 to Rs50bn (£2.7bn), for 1979-80 to Rs50bn (£2.7bn), simply adds urgently to tha

Demand for coal from India's thermal power stations, which provide more than half the provide more than half the country's power, has grown steadily at a rate of 12 per cent a year. But coal output has stagnated at around 100m tonnes, for the past five years, transforming India from a net exporter to a net importer of exporter to a net importer of coal

exporter to a net importer of coal.

In 1979 alone, coal supplies to steel plants fell by 6 per cent, to cement plants by 8.5 per cent, to the textile industry hy 8 per cent, to heavy engineering companies by 14 per cent, and to brick kilns hy 55 per cent. Many fertiliser factories have closed for want of coal.

Steel plants have reached such a desperate position, with coal stocks down to between three and four days' needs, that 1.5m tonnes of coking coal is being imported from Australia and Canada.

Defending its failures, the coal industry blames acute power ahortages, failure by the railways to supply wagons for

power anortages, tallure by the railways to supply wagons for coal distribution, an unpredictable labour force, and an antiquated industry inherited from the private mining companies when it was rationalized in the when it was nationalised in the early 1970s. There is some truth in their claims, but the causes for failure go much

causes for failure go much deeper.

India has proven coal reserves of more than 85bn tonnes, of which about a quarter is of coking quality. The first recorded working began 200 years ago in the Ranlganj coalfield in West Bengal, but production rose to only 280,000 tonnes in the following 100 years.

By 1910, production had risen to 12m tonnes a year, with all of the coal being used for steam raising on the railways and in industry.

in 1911 coking coal was diverted for steelmaking —, by Tata Iron and Steel Company (TISCO). Production was still stuck at 21m tonnes at partition in 1947, but then rose steadily to about 75m tonnes during the nationalisation period of nationa between 1971 and 1974.

nationalisation. mining expert wrote: Quite apart from the moral issues of ownership and management of a country's natural resources, the most telling arguments in favour of nationalisation were the need for vast investment in the mines, in the reconstruction of older mines and for the purchase of new The need for equipment. rational exploitation of reserves and their conservation and the concentration of management skills."

Coal India was created to look over four major mining groups accounting for about 90 per cent of the country's output, Eastern Coalfields and Bharat coking coal covering most of Bengal and Bihar, the Central Coalfialds and Western Coalfields covering Madhya Pradesh, Maharashtra and Orissa. A remaining nationalised company, Singareni Collieries Company, operates independantly of Coal India, in Andhra Pradesh.

Just two small mines were left in private bands — the coking coal mines in Bihar of Tata Iran and Steel Company (TISCO) and the Indian Iron and Steel Company (IISCO). fluah after

A British mining engineer shows an Indian miner how to operate the circular

shearer which cuts away the coal at India's first mechanised longwall face, at the Moonidih Mine, near Dhanbad

This stagnation can in part be hlamed on a Government decision in 1976 to halt expansion in view of what was then thought to be a coal glut. Indapendent axperts retrospectively feel this attempt to "fine tune" output to match demand was a crucial arror. However, many of the problems that now dog the industry would probably have emerged anyway.

Primitive

Many of the mines nationalised in the early 1970s were quite primitive. Coal extraction was still a pick and shovel process in mines that had seen no investment since they were cut a century ago. Even now, such mines account for more than 90 per cent of coal out-

stuck for the past five years. Production in 1979-80 is ex-

pected to be close to 100m

The tiny Pootkee Mine near Dhanbad is typical, About 1,800 miners work manually at coal faces first opened up 100 years ago, producing about 700 tonnes a day. Water streams through the mine and, with power cuts averaging five hours a day, flooding is a constant threat.

Above ground, women load rallway waggons using wicker baskets carried on their heads. The mine has a mechanised front loader, which could fill wagons in one tenth the time, but it is used to a fraction of its capacity hecause to end manual loading would result in

working it is boneycombed with have extracted only coal seams. Up to 1bn tonnes of coal is trapped in pillars left in the old mines and there is no cheap way recover lt. More than underground fires consume about 8m tonnes of coal every year, and immobilise about 350m tonnes in seams around

More than 400 coking coal mines in private use bave heen rationalised to just 85 since nationalisation. Central railway loading bas reduced loading

points from 200 to 80.

A master plan exists to clear the Jbaria fiald of a century of chaotic growth—a web of railway lines and roads—and to shift rivers and townships which have grown up over the coal. nave grown up over the coan.

It will free large areas for open-cast exploitation — and extraction methods which will allow the miners to effectively deal with many of the under-

Inevitably tha plan is very expensive and will cause considerable dislocation for the communities living on the field. No date has been set for either initiating or finishing the plan, but until it is, huge quantities of precious coking coal will remain trapped underground.
The nationalised coal industry

has also inherited terrible labour problems. Gangsterism

hoodlums to terrorise recalcitrant workers.

Absenteeism is chronic. Coal India estimates that between April last year and January, 5m tonnes of coal output was lost than the properties of the coal output was lost than the properties. through absenteeism. One foreign expert on India's infra-structural problems explained that in Bihar, where the problem is most acute. "you just don't have an industrial just don't have an industrial labour force in the sense we are used to in the West. Many don't yet seem reconciled to such basic work babits as turning up on time. During the harvesting season, many mineworkers simply disappear for weeks."

Strike losses have dwindled since January when Mrs, Gandhi won power, and by late February output had risen by 25 per cent to 380,000 tonnes a day. But no one is sure that there is a casual connection, or wbether industrial peace will last. Most feal that labour troubles are far from over, if only because the industry is overmanned to the extent of at least 50,000 workers.

Power shortages have created severe problems for the industry. The Damodhar Valley Corporation, which supplies power to the Bihar and West Bengal coalfields, bas been running at less than 40 per cent of capacity for the past six months, with the result that the coalfields, which need 250 MW a day, have never got more than 210 MW, and on average get 140 MW.

Flooding risk

beavy unemployment.

The Jharia coalfield, on which the Pootkee Mine is situated, provides a large part of India's high-grade coking coal. But after a century of private the nine months to January, but the providing it is benevicombed with the sevently increased the risk has greatly increased the risk of flooding. During last year's monsoons one sixth of the mines were closed because they were

> meant that pit bead stocks rose to a peak of 14m tonnes last year. With the railway system still over-stretched, distribution is still poor.
> Thia problem would be eased

if coal was washed before loading. Goal users complain that up to 25 per cent of the coal they receive is in fact ash, stones and

other extraneous material.

As the railways bave failed so more and more coal is being distributed by road, about 35 per cent of all coal is currently being delivered by truck, at

incalculable extra cost to con-

Coal India bas started a programme of mechanisation which could belp to improve output. At Moonidih Mine, near Dhanbad, the first mechanised longwall face will soon he in opera-tion, using equipment made by the Dowly group of Britain. Three other longwall faces are being worked by conventional methods, and are to be mechanised during the coming decade. The Moonidih Mine currently produces 1,500 tonnes of coal a day, but once the mechanised face is in full opera-tion output should rise to 7,000



Drying peppercorns on sisal matting in Kerala, southern India

Open-cast mining currently accounts for 23 per cent of total output, but this will rise to 45 per cent by 1988, with total production projected at 90m tonnes.

duction projected at 90m tonnes. Within a depth of 250 feet, Coal India has discovered seams averaging 26 metres thick. One deeper seam is 140 metres thick. Efficiency can also be improved by moving heavy coalusing industry closer to the pitheads, and by heavy investment in washing plant.

Executives at Coal India pre-

Executives at Coal India predict that demand for coal could rise from the current 120m tonnes to reach 206m tonnes by 1988. Starting with a production target of 113m tonnes in 1979-80—a target missed by about 13m tonnes—they still aim for 134m tonnes in 1980-81 and 143m tonnes in 1982-83.

These targets are considered

highly optimistic, even though experts believe that current capacity should enable annual production to reach 120m tonnes a year. Coal India's commercial director admits that in other countries this But the greatest gains in output will come from boosting open-cast mining, particularly in the western and central coal-fields. The Singrauli mine, for fields. The Singrauli mine, for always preface projections with the caveat "In Indian circumexample, currently contributes 4m tonnes a year to the output of central coalfields. By 1988, it should be producing 28m

David Dodwell



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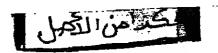


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Tea industry plans to raise output

THANKS TO a steady and subpefore the Indian tea industry in the 1980s is to raise output in step with demand, especially internal demand.

In fact, the challenge in the finance on so hig a scale as the largest source of tea supply 1990s will be very much the same and for precisely the same to achieve a production target very dependable source.

The finance on so hig a scale as the largest source of tea supply to the world market but also a concept to the world market but also a concept to achieve a production target very dependable source.

The finance on so hig a scale as the largest source of tea supply to achieve a production target very dependable source.

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The finance on so hig a scale as the largest source of tea supply to achieve a production target very dependable source.

The finance on so hig a scale as the largest source of tea supply to achieve a production target very dependable source. In fact, the challenge in the the quantitative targets to be achieved by the end of the current decade as well as by the year 2000, but they differ on approaches to the goal.

According to the latest progreater use of technology. jection by the industry as well as some official agencies, India needs to produce 1,400m kilograms of tea by 2000 to meet the growing internal demand in full and at the same time satisfy a bigger export requirement. The domestic consumption of rate of 5 to 6 per cent per year compound with the result that the figure which stood at only 200m kilograms at the beginning of the last decade is likely to touch the 370m kilogram on are level of 1,500 kilograms per herters.

to touch the 370m kilogram mark during the current year. According to the above projection it is likely to jump to 461.1m kilograms by 1985, to 585m by 1990, to 743.9m five years after and to more than 1,000m kilograms by the turn of the century.

Feasible target

 $\dots \ni D_{i,j_0}$

It is encouraging that both the industry and the Government believe that 1,400m kilograms by the year 2000 is a feasible target, but as already mentioned each bas its own approach to the challenge. In the industry's view raising tea production by more than 24 production by more than 21 times over the present level of 547m kilograms (1979 production) would involve at least 250,000 hectares of additional land for new planting, some Rs 1.5hn to Rs 1.6hn of finance plus adequate fiscal incentives for the industry to generate more internal resources to be

ploughed back for development. These are broad ideas. To work out detailed projections of consumption, production and export trends of tea up to the turn of the century as well as financial and physical targets that will have to be set, Mr. C. S. "While Samuel chairman of the century as well as financial and physical targets." Samuel, chairman of the Indian Tea Association, in his capacity group of the industry-which shows that the industry has and insulated from the prices begun to take the challenge abroad."

Government does not think that and an export duty had caused so much additional land such fears to arise in the minds (roughly 75 per cent of the of overseas buyers long accusexisting area under tea) or tomed to see India not only as

productivity can be doubled to an average of 3,000 kilograms per hectare in two decades bybetter organisation and management of resources and by

He knows of tea gardens which bave a yield of 4,000 kilograms per bectare and they are hy no means exceptional cases. Some new land would need to be brought under tea plantation, but not 250,000 hectares, he says.

on average, is the highest in the world and this represents only a 50 per cent increase over a 20year period during which an intensive effort was made to ohtain bigher yields. In any case, tea production is an agricultural operation and the crop is always at the mercy of the elements irrespective of the technology employed. For example, the crop in 1979 slipped back to 547m kilograms from 571m in 1978 and 570m the year herory because of a prologged before, because of a prolonged drought that affected north India's tea gardens. No manage-

ahout it. This dialogue between the Government and the industry is certainly adding to the anxieties of overseas buyers who fear that India may attach less and less importance to exports because of the vast and growing domestic market. An official committee on tea marketing, in the course of its visit to Europe last year, found considerable anxiety among buyers about India's future policy and intentions concerning tea ex-

ment, however capable or re-sourceful, could do anything

The committee reported: "While India was eager in the past to develop its tea exports, it is now wondered abroad how as chairman of the consultative far it will be able to resist the committee of plantation associations, has set up a working mand, beloed by the attempts to keep down tea prices at home

The committee was appointed

government itself had withdrawn all restrictions on tea exports and was even anxious kijograms Disruptions to operations at Calcutta port and frequent strikes by tea warehouse workers bave got in the way, and no more than 200m kilograms are likely to be exported during the current

The present government of exports or cut them drastically, cent.

wants to maximise exports in wants to maximise exports in the prices at bome, and that general. No other policy would would certainly affect the make sense in the current con-industry's financial health. text of heftier world oil prices.

Moreover, it would not he in reventie.

of the industry's total income in 1985 when India, according to that year. No sensible government can ignore these realities.

If the industry were to stop share would drop to 28.7 per

THANKS TO a steady and subHowever, judging from the by the Janata government Mrs. Indira Gandhi has already tea prices in the country would stantial spurt in domestic views of Mr. P. K. Goswami, whose restrictive policy towards declared itself in favour of he very much depressed as exconsumption the challenge chairman of the Tea board, the tea exports leading to quotas maximum tea exports — as it port prices by and large guide

the industry but outside, would the interests of the tea industry like the country to go all out or the country if exports to capture as big a share of were cut or were reduced the world tea market as it can. However, before its fall that were cut or were reduced the world tea market as it can government itself had with drastically under competition The world market is growing. from home consumption. Tea which is evident from the fact exports are a major source of that while India has been exto push up exports furing 1979- India's foreign exchange income, porting 200m kg annually on 1980 to at least a level of 220m and they provide nearly 50 per average for many years, her and they provide nearly 50 per average for many years, her cent of the tea industry's share in the world tea exports revenue.

In good years such as 1977-78.

has progressively declined. With 200m kg in 1979-80, the share exports comprised 65 per cent is just 28.1 per cent, but by

However, India is trying to make up on the value-added side of tea exports. As a matter of deliberate policy, the Government has been giving liberal cash aid to those who export tea in bags, packets or in instant beverage form. The Influential people, not only in trade too bas been responding well and vaine-added tea exports in 1979-80 though only 10 per cent in terms of quantity may fetch more than 20 per cent of the total export income from

> North Africa and Western Asia bave been the best markets from this type of export hnt India has been gaining footholds in east and western Europe, Australia and, of course, which is a particularly promis-ing market for instant tea. P. C. Mahanti



Threshing jute in Bangalore

Jute production may need to increase

THE INDIAN jute industry is ment of cement and fertiliser perpetual disequilibrium. Yet only 250,000 tonnes during of setting up a jute goods export no longer enjoying the super industries and agricultural pro-

fundamental importance to the fully. future of this crisis-prone

The first, of course, is the recently hefty increases in OPEC oil prices. These bave made petroleum-based synthetics totally uncompetitive with jute, especially in Japan and Western Europe. In the United States also, synthetics manufacturers have come under severe cost pressures, and their prices generally are now less competitive with jute than was the case only a year ago. In the circumstances, the Indian jute industry should

have little to fear from syn-

prices rise abnormally high. 60 to 65 per cent of the total

no longer enjoying the super industries and agricultural pro-boom that it did during the second half of 1979. It also feels shaken by the levy of a stiff export duty on hessian, one of its lucrative items, yet the outlook remains basically bealthy, the jute industry's capacity to
There are two reasons for this produce more to meet both the optimism, both of which are of internal and export demand

> demands from domestic buyers are met from new production, the exportable surplus. However, some new mills are manufacturers in overseas coming up outside West Bengal, in Orissa and Andhra Pradesb, manufacturer, Mr. P. K. which will be commissioned in the near future. It is likely, therefore, that 35 to 40 per cent of the ontput will continue to be available for export.

Foreign market

At one stage, India exported thetics on straightforward comes 5 to 90 per cent of its jute merical terms unless its own goods production, but has come down to 35 to 40 per cent now. to be all but lost the foreign which accounts for more than 50 per cent of the total ontput.

Had the domestic market not been absorbing practically the whole of this sacking production, the jute industry would be to the sacking production, the jute industry would be to the sacking production. The jute industry would be to the sacking production, the jute industry would be to the sacking production. The jute industry would be to the sacking production the jute industry would be to the sacking production. The jute industry would be to the sacking production to the jute industry would be to the sacking production. The jute industry would be to the sacking production to the jute industry would be to the sacking production. The jute industry would be to the sacking production to the jute industry would be to the sacking production. The jute industry would be to the sacking production to the jute industry would be to the sacking production to the jute industry would be to the sacking production to the jute industry would be to the sacking production to the jute industry would be to the sacking production to the jute industry would be to the sacking production. The jute industry would be to the sacking production to the jute industry would be to the sacking the sacking production to the jute industry would be to the sacking the sackin The second reason for the It bas all but lost the foreign cheerful outlook is an market for sacking which encouraging expansion over the accounts for more than 50 per years of the internal consumpcent of the total ontput. keen in tion of jute goods. The domestic Had the domestic market not again. market now absorbs as much as been absorbing practically the 0 to 65 per cent of the total whole of this sacking produc-exports during 1979-80 may lessons and follow a stable Only the utput.

tion, the jute industry would reach the relatively high figure export policy. According to the industry with the projected develop have been in a state of of 505,000 tonnes, as against reports, New Delhi is thinking culties.

industry's financial health and in fact for its very viability. Goods such as carpet backing and hessian that are exported are high-value products for which also there is no domestic outlet yet

With export prospects now Jute goods production has hrighter than ever hefore, the averaged about 1m tonnes in industry is showing a measure recent years. Unless extra of self-confidence. Mr. Lalit G. Toolsidas, chairman of the Calcutta Inte Fabrics Shippers Association, says that there is manufacturer, Mr. P. K. Kanoria, feels that "there is ground for guarded optimism about market conditions over

However, the imposition of

a stiff export duty of Rs 1,000 (nearly £55) a tonne of bessian may scare away foreign buyers from a product which bas been in exceptionally good demand this year. The importers may now turn to Bangladesh which is aggressively competing with India. Worse still, such hnyers as have booked their requirements forward well before the levy may now back ont because of the obligation to pay a beavy amount of duty they bave not contra 'ed for,

Whatever may be the Government's justification for imposing a levy on exports—to mop up excess profits or any other— export duties have always acted as a deterrent or brake on

the industry's export affairs, which will certainly be a good usually there in times of pros-thing. Such a conneil will at perity. The crop this year is least eliminate a lot of harm much better than expected,

bitherto has been tackled half- for the next season. modernisation of the manufacturing equipment. And with the Government having set up a fund from which the industry can borrow on soft terms for modernisation purposes, a full-throughout the season. scale effort to update the equipment and the technology needs to start right away.

Serious difficulties

about market conditions over the short term."

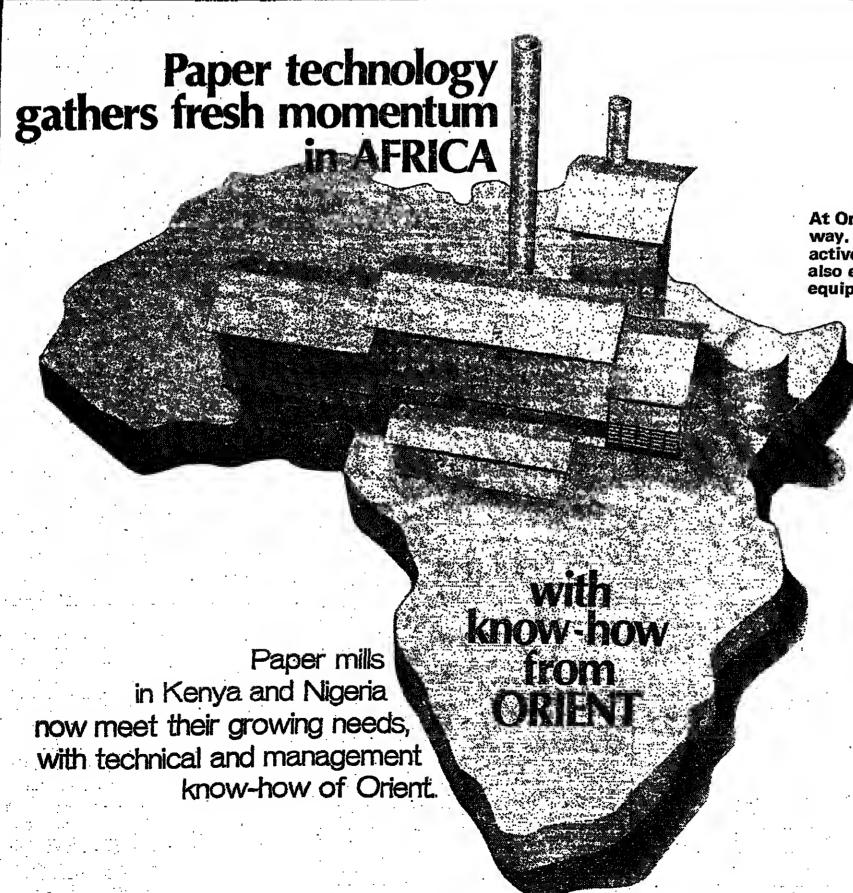
The demand has been increasing from all foreign sources, but significantly, Australian wool interests, the Japanese motor car mannfacturers and even the primary carpetbacking market in the 10 U.S.—a market Indian jute 200ds have long lost to 200ds have long lost to 30ds have long lost to 4 again. In Mr. Toolsidas's estimate, Indian jute 200ds exports during 1979-80 may 20d areach the relatively high figure 20ds exports of the sport policy. According to 20d the export duties 30d the should learn from past 20d the should learn from past 30d the lindustry out of such difficulties in the 30d the sport duties 30d the should separate two serious difficulties in the 30d the sport duties 30d the significantly, and are very 30d there is organised, or even militant, opposition by 12d hour (with full backing from 31d the 3

At least the industry is currently free from its raw material worries which are usually there in times of prosthat excessive speculation is following a bumper one in the doing to India's jute goods export trade.

following a bumper one in the previous year, so there is plenty to go round and indeed there An important matter that will be a substantial carryover

beartedly but now deserves to Consequently, the usual be taken up in earnest, is seasonal increases in raw jute prices which take place between March and April are not there. On the other band, the raw jute price in the Calcutta market has been ruling at a fairly low level

It needs to be noted, however, that while the prices of jute goods have moved very bighthey are still high despite the falls which have taken place



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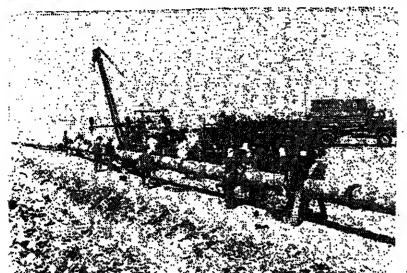
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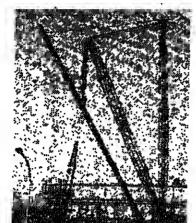
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Japanese contract keeps iron ore exports buoyant

almost level with the water, sail slowly down the Mandovi river in Goa carrying high-grade iron ore to bulk carriers waiting in the harbour

But at Vishakapatnam, the main port of the southern State of Andhra, the outer harbour has been enlarged to enabla the carriers to come closer and be loaded by new modern mecbanical conveyor systems.

These are just two examples of the mannar in which nearly 22m tonnes of iron ore, mined in nearly 390 places in India, is exported annually through 10

India is now the fifth-largest exporter of fron ore in the world and recently won a 19.4 per cent nark up from Japan in price. This is important, since despite the slowdown in world economic activity and the steel industry. Japan bas still found it necessary to revise its long-term agreement with the public sector Minerals and Metals Trading Corporation (MMTC), which exports nearly 60 per cent of the total from India. Last month the Japanese agreed in pay a higher price from the Bailadila mines for ore that is of a similar grade exported by Australia, even though India's efforts to set up an iron-ore exporting countries association on the model of OPEC has not

This will help considerably the National Mineral Development Corporation, the public sector company that is developing the Bailadila mine in Madhya Pradesh. The new long-term contract with Japan envisages the export of 7.8m tonnes annually, including Im tonnes of fines for the first time.

It has also been possible to the up arrangements for iron ore exports from the Donimalai mine in Mysore, Karnataka State in the south. MMTC would be in a position to increase the exports considerably if the facilities at the ports were better. especially in the Visbakapatnam outer barbour which caters exclusively to Japan's needs. It is boped that after an invest-ment of Rs 80m (£4.4m) in the next three years, the port will increase its capacity and exports to Japan will rise.

There is a perennial argu-ment in India about the desir-ability of exporting iron ore as

the recent projects for shorebased steel plants were evolved from these will go to Russia natural pellet feed, and France. But setting up. The oxide pellets sufficient capacity for steel acclaimed by steel building requires more funds. and time to make use of the estimated reserves of around

so the argument bas really settled itself. The reserves are ample and India badly needs the foreign exchange that exports of iron ore fetch. Although customers abroad for Indian steel are still to be sought, provided they fund the establishment of the

port capacity allows. Celebrated pillar

Iron ore was mined in India well before the Christian era and bas been mentioned in the Vedic scriptures. The most celebrated mass of Indian iron, as MMTC proudly points out, is the pillar that still stands nu-rusted after centuries at the Qutb Minar in Delhi. This has an iron content of 99.72 per cent, a quality that is better than anything that the world has been able to produce.

The 15bn tonnes of reserves are located in the States of Bihar, Crissa, Karnataka, Mndhra Pradesh and Goa and complete. The lumpy hematite port 50m tonnes by the midinon ore is bard, compact but 1980s, although deep-draft ports mers elsewhere in the Middle easily reducible. The calibrated-capabla of accommodating up East.

direct-reduction plants. India's an hour are being constructed. fines ore of medium grade is an on the basis of this thinking ideal sinter feed whereas and exports of finished products high-grade fines ore is the best ideal sinter feed whereas

this year) (4.2m tonnes), West Enrope including Holland, Italy, 15bn tonnes than India bas and tonnes). This netted a total of Rs 2,48bn for India last year.

MMTC, which exports all iron

ore except that from the Goa mines, says that in extraction metallurgy. Indian ores— wbether limps or sinter from fines, and pellets from pellets feed—proved to be easily re-ducible and least decrepitative. plants to make it, iron ore exports will continue in as much volume as India's limited The grades exported bave a wide from 55 per cent iron to close to the theoretical maximum (70 per cent in the case of bematite). India exports all four types of ore-lumps, closely calibrated-sized ores, fines and pellets, although the principal

Iron-ore goes out to the world through 10 ports along tha eastern and western coasts; in-creasingly they are being equipped with highly mechanised facilities and are capable of handling large-sized bulk carriers. But it is acknowleged that the facilities are not being improved fast enough for proving operations are far from India's ambitious plans to ex-

variety is hematite.

SMALL BARGES, their decks against value-added items such sized ore is platy, spongy hut to 100,000 dwt vessels with load-

Huge mechanised mines are in operation at Bailadila, Redi. Goe and Daitari. More are coming up at Bailadila, Donimalia The oxide pellets are bighly and Kurdemulch. Mines in acclaimed by steel plants in Barajamade and Bellary-Hospet Japan—which took 15.245m sectors are mostly still semitonnes in 1979. East Europe mechanised while studies are in the advanced stages to work the deposits at Malangtoli, Bababundan and Meghahatuburu. West Germany and Belgium Plans for setting up pelletis-(collectively 169,000 tonnes) ation facilities are being drawn and others (totalling 1.74m np for Goa, Bellary-Hospet, np for Goa, Bellary-Hospet, Bailadila and Barajamada sectors to satisfy those who want value-added items to be made.

Steel plants

This might have to be done port through which the iron-ore slurry from Kudremukh is to go to Iran. Kudremukh is the low-grade area for exports solely meant for steel plants in

The massive project is almost ready to start sbipments in August this year, as provided for in the agreement. But the turmoil in Iran bas meant that the steel industry there has not developed as planned and the contracted quantity of iron-ore concentrates are not needed. Hence, the agreement is to ba renegotiated to accommodate the Iranians and the surplus ore will probably be used at a pelletisation plant to be set up at of India's plans to boost iron Mangalore with eventual custo- ore exports in the 1980s.

against value-added items such sized ore is platy, spongy hut to 100,000 dwt vessels with load- Nevertheless, Iran has at least as plg iron and steel. Indeed, hard and most sought after by ing facilities up to 8,000 tonnes decided to go ahead with the \$240m in arrears (payments were to be made in instalments as the project progressed), Under the original agreement, Iran was to begin receiving first shipments of iron ore concen-

trates from Kudremukh from next August. The Kunremnkh Iron Ore Company, especially set up for the project, is ahead of schedule and, in fact, has asked Iran for the proposed rates of shipments by this unique operation, which involves reducing iron ore to slurry before it goes down a gigantic pipeline to Mangalore

Work has been maintained in accordance with the original schedule because the Indian Government continued to provide funds despite the un-certainty created by Iran's default. Kudremukh has agreed project which, during the Shah's to supply 150m tonnes of iron régime, agreed to develop this ore concentrates over a 21-year period beginning this year. Iran agreed to accept 3m tonnes in the first year, 5m tonnes in the second year, and then 7.5m

tonnes annually. The ambitious project (because it involves using low-grade iron ore through the benefication process which enriches the con-centrates to the required high grade) is Iran's highest investment in India and the only one that has been retained. This is fortunate because the southern state of Karnataka needs it and because it is an important part

K. K. Sharma

Priority for textile industry

THE TEXTILE industry was assigned priority in the sixth five-year development plan and although the programme is under review by the new Government, the targets for textiles output are unlikely to 1971

In the five years ended 1983-1984 production of textiles is scheduled to rise by slightly more than 3 per cent per annum on average. An official working group, whose report formed the hasis for fixing Sixth Plan textiles targets, has projected total cloth production at 12.2bn metres in 1983-84 against 10.52bn metres in 1978. 3 per cent growth is expected to yield a considerable export surplus-in contrast to past vears, when the increase in production was a marginal

per cent a year. Besides the handloom sector (one of the three main components of the textiles industry), which is to get official support to raise production to 3.7bn metres in 1983-84, the organised textile mill sector is to produce 4.Sbn metres of cloth of all varieties, cotton as well as blended five years bence. The third semi-mechanised sector. known as powerlooms, is to produce 8.70n metres of cloth. For the handlooms, the 1983-84 target amounts to a 60 ner cent increase over the 1978 level.

The policy of the Janata Government, in whose regime the targets were set, bad laid emphasis on producing as much as possible by cottage and village industries as a means of maximising employment, especially in rural areas. But the average annual growth of average annual growth of around 3 per cent set for the organised textile mill sector is considered significant. Over the past four years tha annual growth of output was less than 1 per cent for textile mills, which have been clamouring for a higger share in the textiles

TEXTILE PRODUCTION AND EXPORTS Production* Exports† (Rs m) (m metres) 8,931 1971 8.577 1,263.4 1,736.7 9,140 2,653.3 8,908 9,344 3,725.2 3,095.8 1975 9,247 9,551 5,968.0 1977 9,568 6.060.0 10,522

* Of all textiles, both cotton and blended † Of cotton textiles only

production.

The weaving capacity of mills has been frozen for several years as part of the tilt in favour of handlooms. The freeze has to some extent hlunted the edge of competition in the international market, Difficulties in raising the weaving capacity bave reduced the capacity of the textile mills to meet the changing needs of overseas customers. For instance, India does not have modern machinery to produce quality denims, leaving the field to Hong Kong.

Fierce competition in the international market, despite import quotas hy developed countries, has made Indian textiles less competitive. Added to a result, cloth produced

this is the limited modernisation of the ageing plant per-mitted by the Government, which is apprehensive about the adverse impact of large-scale textile mill industry modernisation on the bandloom sector. Only 21 per cent of the total 207,000 looms are automatic. As inferior and the cost of produc-tion is high.

The Government wants, the handlooms sector to grow at a rapid pace for two reasons. First, it provides larger employment opportunities, especially

in villages. Secondly, such a strategy helps exports since developed countries are more

sympathetic to larger import quotas for bandloom fabrics. Despite the quota system, the EEC and the U.S. have emerged as two of the three main markets for Indian textiles. The third is the East European bloc. especially the Soviet Union, which places bulk orders. But Indlan exporters are apprebenbecause political ties between the two countries govern trade relations as well

.Indian exporters have been exploring new markets, because over the past 15 years there has been a directional change in India's textile trade. Africa and certain South-east Asian countries bave set up their own textile industries. The loss of these markets bas heen made good by larger exports to the U.S. and the EEC. The future strategy is to export more to the developed countries and explore the oil-rich Middle East

A recent survey reveals that there is immense opportunities for export of grey fabrics to West Europe provided India supplies wide-width fabrics with longer piece lengths. The scope for export of more finished fabrics and made-ups is also good provided quality is up to international standards. There is still substantial unfulfilled quotas of EEC (20 per cent) and the U.S. (75 per cent).

The success on the export front depends on the pace of modernisation. Nearly one-third of the textile mill industry is in the public sector, which took over closed textile mills as par of the Government's unemploy ment relief operations. The Government instituted a

scheme for selective modernisa tion of textile mills with loans from financial Institutions at a concessional rate of interest of 7 to 9 per cent against the normal term lending rate of 11 per cent. Since June 1979 146 mills have secured loans of about Rs 1.81bn under the soft tions for Rs 3.81bn are being processed. Private textile mills are lobbying the Government for permission to import wide-width looms. Sterling is the intervention

currency for all external trans-actions of the Indian rupee. The recovery of proceeds against textile exports is governed by the pound-dollar rate on the London money market, Over the past few months the pound has been strengthening making the Indien textile exporters worse off. Exporters want pegging of the dollar-rupee parity at a certain level to protect theu

R. C. Murthy

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China threatens EEC market

European Economic Community (EEC) and the prepare the ground for a larger share when fully in 1978 and secured a negotiations start in 1980 for quota for 21,000 tons for 1979. fresb EEC quotas. Exports of Chinese textile

fabrics and their products to the Community are to double to 40,000 tons this year from 20,000 tons in 1978, according to a recent EEC-China agreement. A higher textile quota for China should not by itself be a threat to India as "cheap" textile imports from all developing countries are regulated. India has an annual 80,000-ton textile quota for fahrica and ready-mada garments and this is not fully utilised. Out of the 40,000 tons of textila fabrics (the remaining quota is for garments) India is allowed to export to EEC, shipments of only 22,500 tons (56 per cent of the entitlement) bave been made in the first eight months of 1979. The quota is bound to be under-utilised with the pattern of demand for textiles in Europe shifting from cottons

to woollens in the winter. On

current reckoning. India would be able to fulfil at best 70 per

INDIA IS hracing riself to meet cent of the EEC quota. In contine emerging Chinese threat to trast, quota utilisation by China is better than that at India. For instance, China was able to use the 10,816-ton quota for fabrics India's concern over China's

activities in the EEC stems from quality and competitiveness. In fabrics, the bulk of both of the Chinese and Indian cloth exports to EEC consists of greys. Keen competition is also expected in household linen and cotton terry towelling. China has a well-developed textile industry with 275,000 automatic looms compared with 42,000 in

India's share in EEC textila imports has declined from 7 per cent in 1976 to 5 per cent in 1978 although the market as such has expanded. The Medi-terranean countries have been the ones to gain. This is part of what an Indian textile exporter calls deliberate EEC policy to achieve a redistribu-tion of "cheap" imports to benefit the newcomers.

At present, India is trying not only to utilise fully the quota but also to retain the EEC market share

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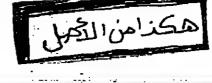
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Indian companies are winning contracts abroad but at home development projects, provide more work. Here a canal is being lined as part of a project to reclaim land, grow forests and provide water in Rajasthan. It has been partly funded by the International Development Association

Foreign success for civil engineering

put a transmission girdle around the world." It says this with some justice since there are now millions of bomes, vil-lages, cities and industrial centres in over 18 countries which throb with electricity transmitted through towers and lines installed by Kamani, now the second largest tower manu-facturing unit in the world with

an average turoover of more than Rs 2bn (£110m). Kamani is a good example of the remarkable strides made by Indian civil engineering firms in obtaining contracts abroad, often edging out firms from developed countries. In the past year, Kamani has won turnkey assignments in power transmission worth about Rs ibn. These include a Rs 65m job in Libya followed recently by a Rs 250m contract with the Electricity Corporawith the Electricity Corpora-tion in Tripoli which involves laying a 350 km 220 ky double transmission line_in

Rs 145m turnkey job in trans-mission for the Public Electrical Works Company of Tripoli. This involves design, supply, construction and maintenance of 66 ky double-circuit transmission line for a route length of

Competence

After Libya, Iran. Here, Kamani bagged the Rs 350m. Tabriz-Manzil second-line project 230 kv single circuit power transmission turnkey job which it considers prestigeous since it is taken as a mark of faith in its competence and economy by the power project authorities. Kamani has executed a 150 km turnkey project of 115 kv d/d transmission line in Thailand. It is also taking part in a number of Indian power projects, including the first 400 kv power system in the conntry initiated by the Uttar Pradesb State Electricity Board which it rates even higher than the 500 ky transmission line towers it has sold to the U.S.

This pride is shared by number of Indian civil engineering firms, including those in the public sector. Most of these are concentrating on the Middle East. The Projects and Equip-ment Corporation, a subsidiary of the State Trading Corpora-tion, bas also done well in Libya

tiating with Iraq, Nepal, Bangla-desb and Indonesia, although it is actually falling behind its

In the first nine months of 1979-80 (April-December) PEC exports totalled Es 195m and Rs 100m by March. But the total of around Rs 300m is well below the target of Rs 560m it bad set for itself. Infrastruc-tural constraints, which have adversely affected exports of engineering goods from India, abroad and protecting the repu-are sald to be the main reason tation of public sector com-for the setback suffered by PEC. panies, It is also boped that by

In fact, there is a growing adopting the "consortium" approach—by which companies market in the Middle East and them consisted the making hide be making bids — more successes other countries should be bandled with care so that Indian companies do not tarnish a reputation that they are acquir-lng. The Ministry of Industry bas made a substantial change Home Misurata area.

Indeed, Libya seems to be In its approach ip overseas.

Kamani's favourable bunting ground since it is working on a Rs 145m turnkey job in transcontracts to completing assignment of the Public Electrical

ments already in hand.

Many public sector undertakings are way behind in completing contracts. The example of Engineering Projects India (EPI), whose major turnkey construction contract in Kuwalt is lagging behind and costing both the company and Indla heavily in terms of reputation. is one example that the country does not want to repeat. The final phase of the Rs 2.3bn Ardlya project being executed by EPI may he awarded to some other company and this is a major blow since, it has not helped India's image. are now on a repair job and

hope to make good the lors. There has been such a tug-ofwar for turnkey jobs abroad that many Indian companies have been competing with each other This undesirable feature is heing sought to be rectified by naming taking turnkey projects in the

For civil construction projects, countrywise allocations have also heen made among public sector companies. For instance, Engineers India Ltd. (EIL) will concentrate on petroleum re-fineries, petrochemicals, fertilisers, cement and paper. Bbarat cover such varied fields as theavy Electricals (BHEL) will be responsible for power generation and also be the lead agency to the such that the such th

PEC is concentrating efforts on securing turnkey contracts ahroad and is currently negoOther "lead" companies gineering India, Howe (India) other "lead" companies gineering India, Howe (India) turnkey projects. Commercial include Hindustan Steel Construction, Engineering Projects lurgical and Engineering Consanction for small projects as India, Hindustan Machine Tools, sultants (Ranchi), National In-the Projects and Equipment Cor-dustrial Development Corpora-poration, the National Building tion, Rail India, Tata Con-sanctioned by the public finan-Construction Corporation, the sultancy Services, Tata Consult- cial institutions and export pro-International Airports Authority ancy Engineering and Water motional agencies. Even this and the Indian Road Construction and Power Development is considered inadequate, but tion Corporation.

That the need for such an approach bas arisen indicates the seriousness with which the Government is going about the work of capturing contracts abroad and protecting the repu

Today. Indian coosultancy notoriously slow, even in the organisations cover very nearly export field.

to make bids abroad by pro-Government procedures are

the entire spectrum of indus. What is causing concero is trial and infrastructural activity that, even though the total

KAMANI Engineering Corporation of Bombay, leaders in bigbot tension transmission, says and bousing projects on a turn-proudly that it has "virtually key basis.

Rs 400m order for construction for composite projects for power petroleum, power and botel with nearly 15,000 qualified protects for power petroleum, power and botel with nearly 15,000 qualified protects.

fessionals working in more than construction for composite projects for power petroleum, power and botel with nearly 15,000 qualified protects.

fessionals working in more than construction for composite projects for power petroleum, power and botel with nearly 15,000 qualified protects.

Notable among them are livolved in a Agrima Project Engineering Indian firms are heing helped with nearly 15,000 qualified protects. mostly to the Middle East and North Africa. It is true that many consultancy contracts and those for turnkey jobs for setting up textile, sugar, cemen and power generation have been won. But it is a measure of the potential of the country that it is acknowledged both by the Government and the companies concerned that the achievement of Indian industry; as far as project exports are concerned, is not proportionate to its capacity. In other words much more can and will be

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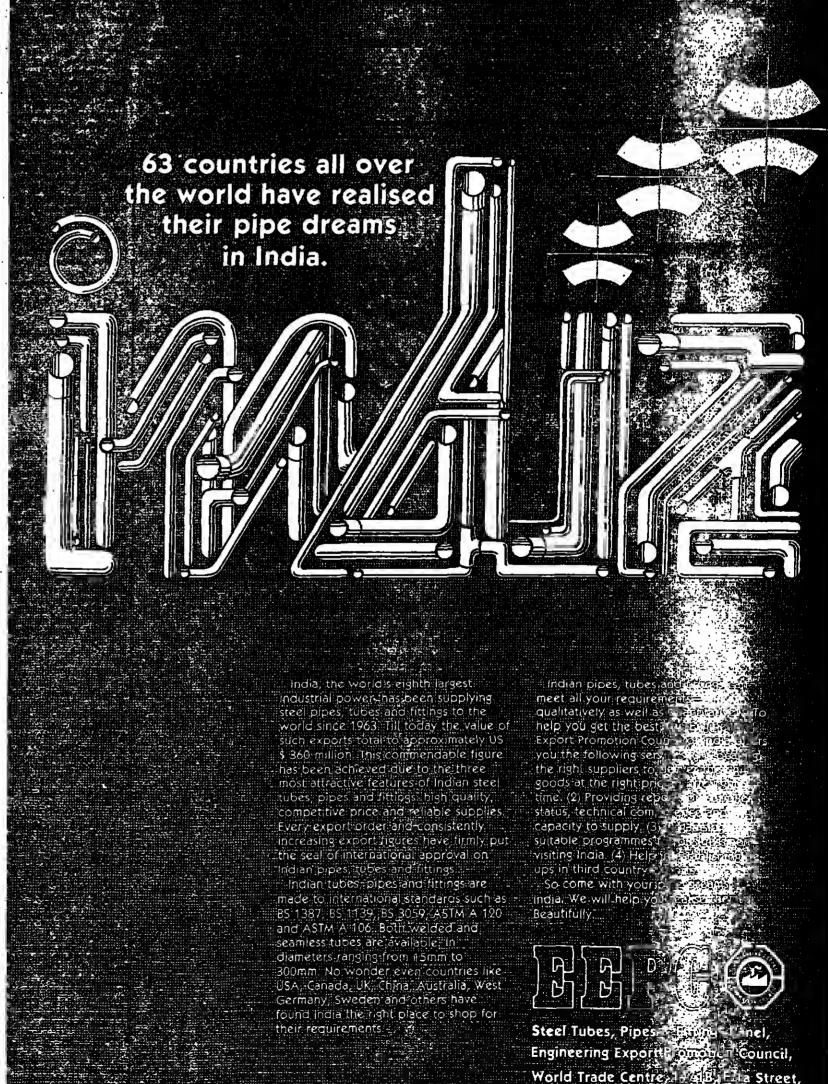
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asked by the Government to co-ordinate promotional efforts in

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delegations from abroad and sending Indian teams overseas

to explore further possibilities.

ing group to identify sectors

where Indian consultancy ser-

vices could be provided and to identify and analyse the

strategy to be adopted for

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group will also study problems

faced by consultancy organisa-

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The Federation has been

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National Building Construc-tion Corporation: civil con-struction of 1,300 houses in Libya [\$112.50n1), National Building Construction Cor-poration for the Shutait Sewer Works in Iraq (\$5m). Bullders International, for construction of wbolesale market centre in Qatar (\$9.90m). Continental Construction for construction of dams in Lihya 1890m), Continental Const-action for draining and sewerage scheme in Iraq (59.38m).

Indian Road Construction far building roads in Libya (SI7.50m), Engineering Projects India, for hallding a defence camp ln Kuwait (\$100m), Engineering Projects India, for construction of a residential complex in Kuwait (\$31.25m), Shah Construction Company for construction of a hridge near Khider Iraq (\$5.75m].

Bridge and Roof Company. for civil work for purification and treatment plant of sewerage project at Najaf and Kerfa in Iraq (\$6.75m). Engineering Construction Cor-poration, for civil works for terminal huilding complex of ney International airport at Abu Dhahl (\$35m), Engineering Construction Corporation. for consultancy and export of

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Outlook for steel uncertain

during the 1970s, if the coun- log corporation. try is to have an installed Mr. Pronah Mukherjee, the new be achieved.

pansions at Bhitai and Bokaro. idle, thereby aggravating the taking their capacity to 4m steel shortage at home. tonnes each, are completed over

Except for the 3.4m-tonne at Visa-Khapatnam posing all the challenges. which is being set op with Russian help-which, incidentally. would mean that the Russians have belped build up two-thirds of the total steel capacity up to the 1980s—there is no prospect of another greenfield site plant being built in the near future.

Corporation, the Davy Ashmore group, and some German. French and Japanese steel companies showing interest in Indian steel projects, but nothing really materialised. The Steel Minister of that government. Mr. Biju Patnaik, often tried to bring in foreign technology and capital for export-oriented coast-based steel projects but his efforts were no more successful than the government or governments to which he helonged.

Timetable

The new Steel Minister has een talking about "self sufficiency" in steel in the 1990s which should imply that one or two more steel plants will he built to take India's capacity to 24m tonnes by 1990. But the point to consider, therefore, is whether the new plants will he built entirely with indigenous technology and equipment: Of course, India has built a strong technological base, at east as far as the steel indus-

try is concerned, but If the heavy engineering corporation is to he entrusted with the task of making all the equipment for the Visakhapatnam as well as other new plants, a task which most probably will be assigned to it, then the chances of the steel programme following a timetable will become very un-certain indeed. The long delay

INDIA'S STEEL industry needs Bokaro steel plant is due largely a faster rate of growth in the to delayed deliveries of equip-1980s than has been possible ment from the heavy engineer-

Thus the long-term outlook. capacity of 24m toones of crude for the idustry is rather uncersteel by the end of this decade tain. All talk of "self-sufficiency" in the 1990s notwithstanding. steel Minister, has just said that Even in the short run, the inthis is bis government's larget dustry has come up against for 1990, but bas not given any serious problems owing to poor clue as to how this target will infrastructural planning in the initial phases which have been Present capacity is about 11m forcing the industry to keep a ingot tonnes. If the major ex- substantial part of its capacity

As one expert has put it. "To the next three to four years, begin with, the problem was a then the installed capacity would dearth, of adequately-trained go up to 15m tonnes by the mid-1980s. soonel. Now it is the infrastructural insufficiencies which are

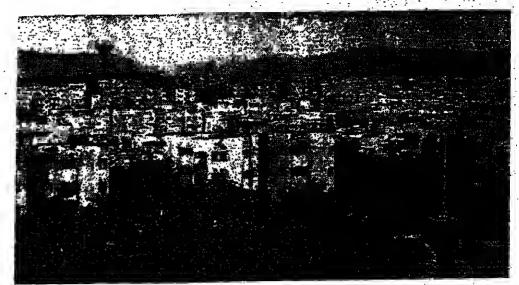
Poor foresight has meant that power planning for the steel plants has been the faultiest of all. The major steel plants at Durgapur, Bokaro and Burnpur (Indian Iron and Steel) depend heavily on a single power generation agency, the Damodar Val-During the Jansta rule there ley Corporation, which has been were reports of the British Steel performing very poorly in receot months. This has hit these steel plants so hard that, ofteo, rolling mills cannot roll all the ingots produced with the result that the plants are now having to carry disproportionately heavy ingot stocks.

Captive power plants have been sanctioned for Durgapur and Bokaro but these will obviously take time to be built, and they will be built at today's cost which is much more than what it was in 1970 when sug-

gestions to huild captive power facilities were made.

The coking coal problem is going to remain with the in- and melting scrap shortages, dustry for a long while yet, not are expected to produce only only because of the country's limited endowment but because of the inability of the railway system to transport the output from the mines adequately. The problem of more efficient benefication methods and finding other solutions to the high ash prob- solid reductant, are heing set lem remains, but if the private up. Negotiations are also going company Tata Steel has managed with Indian coal all these years why cannot the public sector steel plants do the same? The Government's strategy now is to make the coal industry produce more and compel

the railways to move coal to the steel plants and power stations on a high-priority hasls. The Janata government's policy of importing low ash coal has been abaodoned because of the high How the Infrastructural inadequaries are costing the country heavily can be judged from the



Low-rent housing for workers of the Tata steel company at Jamshedpur, Bihar

ecessitating imports on a substantial scale. For 1979-80 the country has

ordered imports totalling 1.9m tonnes and if the production rate does not improve significantly during 1980-81, it is hard to see how further large imports can he avoided.

Steel demand in 1979-90. according to Dr. P. L. Agrawal, chairman of the Steel Authority of India, is higher by 12 to 15 per ceot than that of the previous year, and this bighrate of demand growth is expected to continue in 1980-81 as well. In the circumstances, the use

of electric-arc furnaces is being encouraged, to partially bridge the supply gap. Together, they have an installed capacity of 3m tennes, but due to power tonnes of crude steel in 1979-80, the same quanity as in

the previous year. To get round the melting ore and non-coking coal on with Indonesia to set up a joint venture there to produce sponge iron with Indonesia's natural gas and India's good quality iron ore. Part of the output will be brought back to India; for use by the steel plants.

.Conditions

Some experts feel that technical conditions at the plants may not be as good as the managements claim. The three public sector steel plants-Rourkela. Bhilai and Durgapur were set up nearly 25 years ago. If nothing else, arrears of fact that the average rate of If nothing else, arrears of capacity utilisation in 1979-80 modernisation in these plants may not go higher than 60 per must be considerable now. cent. During the past two years According to the new Steel Industry produced only 5.7m mndernisation has been drawn tonnes of finished steel in 1978- up for the plants and the pro1979. This has created shortages posals are being considered by

According to the Steel Authority of India, the country's equivalent of the British Steel Corporation, this modernisation programme is as much slanted towards improving the operational efficiency of the plants as to updating this technology. India's steel technology is a blend of the old and the new and the idea now is to discard as much of the old as possible.

In Bbilai, the first Russianhuilt steel plant, the modernisation programme includes the introduction of L.D. converters, continuous-casting facilities and a huge plate mill with a 1m tonnes capacity. These are in addition to extensive renovation of all old equipment.

The public sector steel plant at Durgapur has a modernisation programme for which the help of the British Steel Corporation is being accepted. Here the problem is not only of modernising equipment but a scrap problem two sponge iron change of the product-mix by plants using the domestic iron adding some high-value proadding some high-value pro-ducts so that the plant gets out of the unfair stigma of being a losing concern most of the time. This would involve some expansion side by side with modernisation.

> A significant part of the proed modernisation programme for Durgapur is the installation of a hlown nxigen converter aloog with a continuous easting unit. This, however, is a research and development Item which is meant for gaining experience in the latest techno-logy in steel making so that, io due course, the steel industry as a whole benefits from the experiment.

The Indian Iron and Steel Company, which once belonged to the private sector but is now part of the public sector, is with other units but there is ing capacity, and in a much less emphasis on revamping shorter time. the technology than on rebuild-

plant at Bokaro naturally has all modern features and its steel melting operations have been computerised. The plant in Bhilai will be computerised soon and the third Russianaided steel project, at Visak-bapatnam, will also have the key operations computerised. Thus some areas of steelmaking in India will be as modern as

anywhere in the world. As for the oldest steel plant in the country, the Tata Iron and Steel Company—which is still called the private sector of the industry as it is managed by Tatas though holding only per cent of the capital-it too has a modernisation programme on top of a renewal and replacement of machinery scheme which has been in operation for

Modern features

The main idea behind the modernisation programme is to replace part of the old steelmaking capacity by a new 1.1m tonnes oxygen steel-making plant. There are other modern features such as continuous casting but the centrepiece is the oxygen steel-making plant so that the works can make steel faster and thereby cheaper.
To finance the programme—
the total cost is estimated at Rs 1.600m (£880,444)—the com pany proposes to borrow ahroad to meet part of the cost.

It is a plty that a highly efficient unit such as Tata Steel is not being encouraged to double its installed capacity to 4m tonnes—although this is what the company is well equipped to do and has been wanting to do. To put up a brand new plant on a greenfield site would cost many times what it would take Tata to add

P. C. Mahanti

PROFILE: M. H. MODY

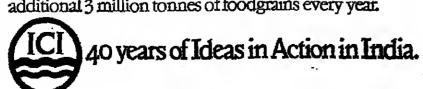
The things ICI have pioneered Vigilant eye on Tata group in India are

things India needs. "Make it vourself. Then you won't have to waste

> precious foreign exchange buying it". ICI have translated this philosophy by pioneering the manufacture in India of caustic soda/chlorine, explosives, polyethylene, rubber chemicals, polyester fibre and bipyridyl herbicide. These products all meet the basic needs of the Indian nation.

Pioneering carries its own costs and risks, but brings its own rewards. Thus ACCI has seen its efforts in promoting polyethylene conversion result in the development of a small scale industry employing over 150,000 people today. Likewise, IEL explosives have facilitated the spread of border road networks for defence and the overall growth of the mining industry. And through CAFI's efforts polyester/cotton weaving has been extended into the handloom sector.

Participation in national growth continues with a Rs 880 million investment now underway to expand fertilizer manufacture. On completion of the project in 1981, the output of this plant will help to produce an additional 3 million tonnes of foodgrains every year.



The ICI Companies in India are: The Alkali and Chemical Corporation of India Ltd. Indian Explosives Ltd. Chemicals and Fibres of India Ltd. Crescent Dyes and Chemicals Ltd. tion and Broadcasting, Mr. Vasant Sathe, has urged that a start should be made, even if only in one city and on an experimental hasis.

His critics retort that such a step would be a pointless waste of resources. They reply that TV is. anyway, largely confined to the urban areas and has become mere appendage to the Bomhay cinema, catering for the lowest common denominator.

The argument is typical of the country's electronic industry.

Many within it want to push
forward the frontiers of
knowledge but know that if they do they will only add to the country's social problems. No one is more aware of this dilemma than Mr. M. H. Mody, Burroughs, and some of the country's leading businessmen. "This country," be says, "is full of entrepreneurs and if they were only set free they could do wonders for the economy. But

inhibits them. "There is a strong demand for computers, for example, but it can take at least 18 months to get an import licence and as long as five years is not unnsual. This is bureaucarcy gone mad. Many companies which want to put in computers won't even bother to apply, knowing they have to face such delays."

bureaucracy sits on them and

Mr. Mody, an accountant by profession, is aware that in a country like India, the introduction of computers has to be undertaken with great social "When you have so much

unemployment, as we do. and when we create work to employ people, you must he very careful India's leading businessman, about doing anything that leads Then be is to be made president to unemployment. The social of the Associated Chambers of

you absolutely need computers. federation of British Industry. Later this year millions of This will bring him even more enumerators will go out across into contact with the Governthe country to take the census. ment. If the answers were not pro-

has been handled manually.
"More clerical automation is not good for the country. Companies must be allowed to use computers selectively where the job could not otherwise be

It is a measure of Tata's confidence in the future of the country's electronics industry that it should have linked with Burroughs two years ago in a 50-50 partnership (unusual enough in a country that likes enough in a country that likes to keep foreign participation to 40 per cent). It is an even greater measure of its confidence that Tata should have given Mr. Mody the task of running the company.

Distinction

For Mr. Mody is chief execu-tive of Tata Sons, the parent company of the giant Tata group. For half the week he is huilding Tata-Burroughs, a company with "one general, a lot of very good troops, but too few officers." For the rest of the time, he runs the group from his Bombay office.

Mr. Mody has been with the group for only eight years. But his training as an accountant helps him to keep a vigilant eye on the group's multifarious husinesses.

He was trained in both India and London, where, in 1956-57 he was a graduate student of the London School of Economics. And he has one other rare distinction: he is a chartered accountant in both India and Britain.

Later this spring, Mr. Mody certainly will merit the title of cost of unemployment, after all, Commerce and Industry of India, a post roughly equivalent But there are fields where to the presidency of the Con-

Mr. Mody detects a change for

THERE IS a sharp little cessed electronically, we should the better with the return of not bave the results before the Mrs. Indira Gandhi's Congress the moment over whether colour television should be introduced. The Minister of Information of the Mrs. Indira Gandhi's Congress the moment over whether colour television should be introduced. The Minister of Information of the 1970 census, which has been harded manually and a sound industrial infrastructure. antomation. It was committed

to the villages and wanted to encourage small-scale produc-"Silicon chips are now produced in ten of millions. But there is nothing produced in this country which needs 10m years. chips. Despite this, the

Government is setting up capa-

despite its many problems, has a sound industrial infrastructure and the capacity to grow.
"We are self-sufficient in many We are entrepreneurs. We shall take off—despite the layers of bureaucracy. But don't ask me when that will he. It could he six months or six

Anthony Moreton

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Vehicle production lags behind

LIERE OTHER key sectors, of India and Industry, commercial ponents without which the outside. Hence the government's plant to manufacture mode decision to allow expansion of diesel engines for their wolf. websicles have been badly hit by infrastructural constraints and actual production is way behind substalled capacity. Tata Engineering and Locomotive Company (Tejco). The largest plant making commercial vehicles— suppliers of fuel lajection with an installed capacity of pumps for diesel engines and solven the suppliers of fuel lajection. He says that Telco was asked by the government itself to expand its capacity despite the Monapolies and Restrictive making commercial vehicles— with an installed capacity of 36,000 trucks and buses at Jamshedpur and Poona— expects to lose production of at least 6,000 vehicles in 1979-80 simply because of a shortage of ower and similar difficulties.

inevitably will bit exports since Telco has sales in more than 40 countries. Demand for its vehicles, initially made in collaboration with Mercedes-Benz but now totally indigen-ously and independently manufactured under the Tata brand name, is growing both at bome and abroad. But its chairman. Mr. S. Moolgackar, complains bitterly of the considerabla under-pullisation of capacity hecause tha "power position is catastrophic."

Manufacture of commercial vehicles hase been adversely not nnly by power simrtages but by the chain effect this has on their ancillaries

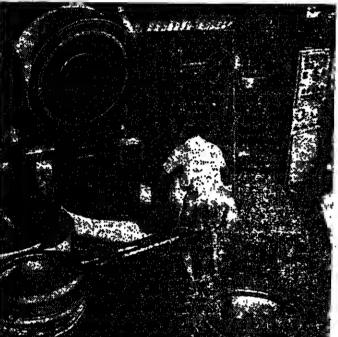
Mr. Moolgackar is sharply critical of the Government for its failure to tackle the problem of infrastructural facilities. He points out that half the price of trucks goes to the government in the form of taxes. However, hardly anything has been done to improve the conditions of highways and roads so that truck operators bave to function uneconomically.

Energy saving

If even balf the tax collections were used for improve-ment of the industry's infras-tructural needs, says Mr. Moolgaokar, not only would production increase but there would also be a considerable saving

of scarce energy.

Demand for commercial vehicles is growing and the Indian manufacturers are unabla



Making truck tyres at the Dunlop India factory at Ambattur, near Madras

Monopolies and Restrictive Trade Practices Act that bans growth of the established "large Government delayed approval of the expansion it had itself sought and two years elapsed before Telco's present capacity lished. In the meantime, costs had escalated.

Tha government bas now cleared plans in principle for expansion of Telco's capacity to 46,640 vehicles under the system of antomatic growth of installed capacity notwithstanding the Act, which allows 5 per cent expansion annually to manufac-turers of commercial vehicles. Telco could thus go np to 56,000 in the next five years at an additional investment of R583m (£32m). The company is expected to issue convertible bonds for financing this, although Mr. Moolgaokar proudly says that Telco bas up problem of finding funds.

Additional capacity has been approved for other units also. The Government bas just cleared Ashok Leyland's Rs 2.7bn scheme for increasing its production from the present 12,500 vehicles to 40,000 a year. This will involve setting up new manufacturing units at Karna-taka, Maharashtra and Rajsthan states in addition to Ashok Leyland's only existing plant at Madras. The majority share in Ashok Leyland is held by British Leyland, the parent

The Simpson group, which bolds a licence for manufacture to make Ford trucks which are to be imported initially. The collaboration with Ford bas been approved. Manufacturers of lighter trucks like Mahindra and Mahindra, however, are not joining in the expansion programme since they have considerabla idle capacity. Nevertheless, Mahindra and Mahindra is embarking on a modernisation

programme.
This involves an agreement with Peugeot of France for

(which are mainly Jeeps). The new plant will involve an investment of Rs 160m and will manufacture 25,000 diesel

Mahindra's present plant has a licensed capacity to make 25,000 vehicles but it is considerably underutilised since production is now just 13,500 Jeeps and 4,000 light trucks (the company also makes about 12,000 tractors, accounting for about 20 per cent of the Indian market)

commercial vehicles is increas-ing by 25 per cent annually, despite fears that the withdrawal of the system of national permits to truck operators would lead to a marked fall in sales. One reason is the prob-lems which bave slowed down rail transport and this has encouraged increased use of road hanlage.

Onenes of tracks

The current diesel fuel short-age has given ample evidence of the popularity of trucks and buses. All along the highways are visible queues of trucks, often more than a mile long, on both sides of diesel pump stations waiting for the supply of their limited ration.

Going by the current level of production, the demand for commercial vehicles will undoubtedly ontpace their availability (even after imports are taken into account) but there is no intention yet to curb exdoes not want to lose estab-lished markets. Hence the emphasis on increasing capacity and production supplemente

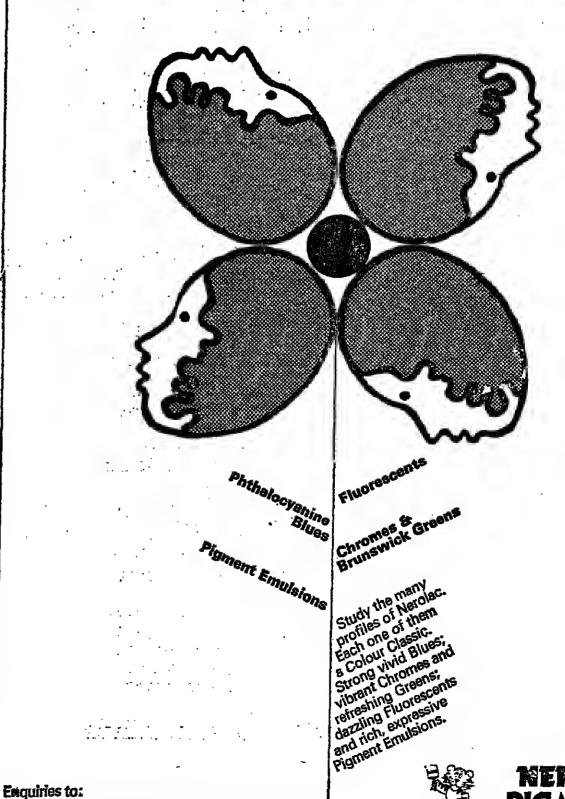
by imports. Because of production constraints, the industry will not be able to achieve the target of 67,000 commercial vehicles set for 1979-80 which represents 15 per cent growth over the

preceding year. Even during 1978-79 produc tion of commercial vehicles, which attained an impressive 41 per cent growth with an output of 158,260 was still lower by 1,740 vehicles compared to the farget of 60,000 vehicles set for tha year. The total production of commercial vehicles in 1977

K. K. Sharma

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Breakthrough aids joint ventures

reaped an abundant harvest.

But the significance of the tieup between the Indian and Swiss firm, which will result in a com-pany to be named Indo-Swiss Engineering Company, is that not only does it represent the first link between a major company from a Western-developed country and an Indian firm for joint blds but shows a recognition of Indian industrial

So far, for the past several years, there has been much dis-cussion between the developed world and the Indian Government on the desirability of such tie-ups. The argument is that, apart from the obvious advantage that India has in the form of low labour costs, the country has also developed appropriate technology that is suitable for

finance available with the are mainly for the purpose of western world, this could result without the intention of the purpose of without the intention of the purpose of t in mutually advantageous jebs in developing countries. But this bas had limited success and, for the most part, industrialised countries bave been content to allow a limited number of subcontracts to Indian companies.

Pacesetter

ves there vinced me

The Swiss agreement is a breakthrough because, for the first time, the much talked-about tie-ups between companies of the industrialised countries and India to operate in third countries has actually been translated into action,

The venture could prove to be a pacesetter. The new company will function mainly in the Middle East and MECON hopes to get a considerable amount of opet a considerable amount of design work as a result. For instance, Alusuisse is currently negotiating with Libya for a Rs Sbn alumina project and a major chunk of the design work major chunk of the design work to sell out, the Chinese buyers as well as construction and immediately got it going profit-

tively low bids for projects.

The breakthrough

important but so far it remains the only one, although similar ventures bave been discussed elsewhere. But so far, joint ventures in which Indian companies have been associated are mostly those in which they have invested in other Third World

Maximum use

Not all these ventures have been successful, not even in Malaysia where there is a beavy concentration. An exception is tha Indo-Malaysian Engineering Company started by Kirloskar Electric of Bangalore and tha reason seems to be the latter's conscious decision to make the maximum use of local capital and manpower.

Indeed, Kirloskar believes that most Indian joint ventures ing progressively the local con-tent. This violates tha criteria for joint ventures allowed in India itself where the Governmant insists on Indianisation of both the equity and manpower. Kirloskar is an example to follow since it went to Malaysia with the belief that "business is

nnly for tha tough."

Malaysia is a competitive market where the strongest survive and, if many Indian joint ventures there have fallen by the wayside, it is because they are not getting the preferential treatment they are used to Lacking Government backing, they fail to get off the ground and fall victim to what some consider is a ganging up

engineering work will probably ably.

Do be done by MECON, which Kirloskar bas not had that the already bas an international universal success and it speaks venture reputation.

It will also result in orders Philippines where it found it is ment.

tion to finance and supply of technology. Indeed, this is fol-lowing guidelines set by the Government which believes that Indian companies bave the appropriate technology for the Third World and encourages them to push ahead.

It has not elways worked this way. In fact, one reason why there are so many Indian joint ventures abroad is that there are limitatims placed no tha expansion of the so-called "monopoly and large industrial houses" inside India and so they have been forced to look outside.

Towards the end of 1979, 53 joint ventures were launched by these large industrial houses.

these large industrial houses. This accounts for about 25 per cent of the total, while in terms of equity participation they accounted for as much as 74 per cent. Birlas tops the list with 14 units in production abroad, with a total equity participation of Rs 135m (£7.4m) and nine units tinder implementation with an equity participation of with an equity participation of

Thapars follows with six Tatas with four and J. K. Singhania with three. Like other joint ventures, most of their investment bas been in the form of plant and equipment while fees for technical knowbow account for 8 per cent of the investment. Although restrictions on financial participation have been eased, they are still sufficient to limit actual cash investment to ficance.

Joint ventures are mentioned repeatedly as part of Government policy, but by and large Indian companies have been slow to take these up unless they feel they bave to in order to expand, or can make gains The corporate sector in India has had too sheltered a life inside India to really feel the need to look outside, although this is now changing slowly.

On the whole it remains true

that the policy approach to joint ventures has been guided by computations of export develop-

EARLY THIS year, Alusuisse of for Indian companies since the impossible to function without Initial failures of joint ven-Switzerland agreed to float a agreement with Alusuisse stipn-jointly owned company with the lates that the "maximum pos-officials and businessman. But 1970s, have acted as an inhibit-Switzerland agreed to float a greenent with Aussusse supplied of company with the lates that the "maximum possible supplies of equipment" will it plans to start a trading company in Kenya and another in the countries. This to gain by using the cheaper target is obviously the Middle East, where Indian firms bave can provide to make competitively low bids for projects.

Switzerland agreeded to float a agreement with Aussusse supplies of equipment" will it plans to start a trading company in Kenya and another in Malaysia.

In all cases they will follow the dictum: avoid using Indians that their participating in turnkey continues, particularly in the sarry officials and businessman. But they are the final to start a trading company in Kenya and another in Malaysia.

In all cases they will follow the dictum: avoid using Indians the dictum: avoid using Indians to start a trading company in Kenya and another in Malaysia.

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Figure 1 the disturbed to make company in Kenya and another in Malaysia.

In all cases they will follow the dictum: avoid using Indians to start a trading company in Kenya and another in Malaysia.

Figure 1 the disturbed to make company in Kenya and Government approval bave not been implemented so far). Partly this is because of procedural hurdles put by the Government itself and also because of the lack of understanding of conditions in the

> One critical study of Indisn joint ventures abroad points out that the whole concept was a sequel to the capital goods recession in the country in the late 1960s and the consequent foreign exchange crisis. The main endeavour has been to use joint ventures as convenient outlets for idle capacity in capital goods units and to earn, foreign exchange.

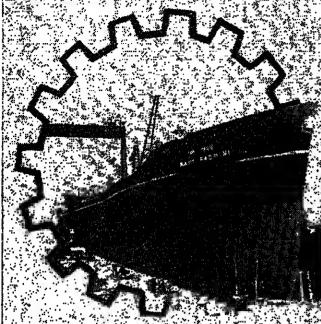
Financial ability

This philosophy persists. An official statemant says: "Joint ventures are mainly an export promotion measure and to the extent possible, our equity participation should be in the form of supply of machinery and know how." The efforts of many Indian investors were not always suited to the peculiar market and economic conditions in the investing countries, nor was the competition anticipated by them (as Kirloskar's did).

The result was that the majority of Indian investors who ventured abroad did not have the managerial and financial ability to withstand the initial setbacks. In some cases, even the much-talkedabout technical support did not materialise and this bas tarnished the image of Indian companies abroad. Even so, the overall perform-

ance is not quite so had as the study suggests. The 107 units in operation at the end of December, 1978, accounted for exports of Rs 238m in plant and machinery by way of contribution to equity capital of Rs 277m. They repatriated Rs 21m in dividends and Rs 46m as know how fees and engineer-ing services. The figures are bound to increase, so at least the official policy of making joint ventures earn foreign exchange is working out slowly.

K. K. Sharma





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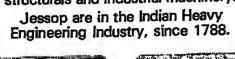


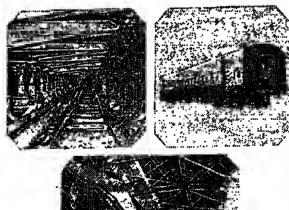
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Machine tools slip in world league "India's machine-tool productry amply demonstrates the vast progress and the vast problems of India in the 1980s. Exports of machine tools have grown

but so bave imports, to about wice the value of export earn-

Total production and variety of India's machine tools have improved steadily, but the country has slipped down the international league to 21st position and has dropped below Taiwan and South Korea.

For all this, the Indian industry says there could be extra foreign orders for the taking if only there were more capacity, if the power supplies were regular, if new investment were encouraged, and if only deci-sions were takan quickly.

A key area such as machine tools tests the appropriateness of government policies. Small may be beautiful, but a machine tool maker cannot build or develop without a good market.
Monopoly may be barmful, but
an Indian "monopoly" company
is tiny on a world scale; yet it is on a world stage that machine tool makers must perform.

Import substitution can bring beoefits, but it also brings dan-gers in a rapidly-developing world of falling behind and continually having to import the latest, most sophisticated, and most expensive, machinery. Self-reliance is a good thing, but if pushed to extremes can cut a country off from new technological deveopments.

of the Machine Tool Manufac- and Alfred Herbert. turers' Association. "But we can't export in a big way because of domestic demand and because of the aize of our com-

"America, for example, would like to offload the simpler uneconomic machine tools and import them. This could be an opportunity, but it means producing 200 or 300 or even 400 machines a year, whereas the total production of most Indian companies ia 100 machinea a

Dominant company

Total Indian machine tool Total Indian machine tool production in 1979 is estimated at about Rs 1,210m (\$150m) by the association, though the authoritative journal, American Machinist, puts India's production slightly lower at \$129m.

The State-run HMT, which used to be known as Hindusthan Machine Tools is the dominant

company with annual production valued at more than Rs 400m. HMT changed its name partly because of diversification which has taken it to making tractors and watches as well as machine tools. Goods hesides machine tools account for about half of HMT's output. Of the 50 per cent of machine production in private

INDIAN PRODUCTION

Year	Production	Impor	Export	production in consumption %
1955	0.68	5.29		II
1962*	10.4	26.04	0.11	29
1970	37.23	18.30	2.79	71
1975	104.3	44.05	8.18	74
1977	109.57	35.72	13.66	83
1978	121.05	40.00	20.50	86
79.0			exports were m	ade.

Source: Annual report of Indian Machine Tool Manufacturers'

India's progress through im-port substitution has been substantial and today the country is more than 85 per cent selfsufficient. As an example of the success, over the last few years India's import policy has been liberalised; but as far as general purpose and standard machine tools are concerned imports have been few because Indian machines are available

at competitive prices.
But now a plateau bas been reached and new policies will have to be carefully considered. some of which may be in con-flict with the Government's overall ambitious.

One problem is India's lack of economic growth. So far the order book has been good, to some extent because sbortages of power, iron, steel and other raw materials have slowed production. But industry sources fear that machine tools are the Machine Tools, is the dominant first to suffer in recession and the last to recover, and predict that with the continuing oil crisis important machine tool users such as motor vehicle industry ancillaries will be badly affected.

In terms of the ambitions of the Indian planners, the machine tool industry seems to be falling behind. The official aim is to see capacity reach Rs 3bn and production Rs 2.5hn hy 1983. Exports should reach Rs 750m, at least according to the targets. All of this looks

optimistic today. According to Mr. Sulakhe: There has been hardly any new investment in the past two yéars in machine tools." New investment requires licensing and under India's cumbersome procedures that takes months if not years to accomplish. And with any company with assets of Rs 200m falling under monopolies regulations, progress can be even slower and

more tangled in red tape. Moreover, progress means new technology and this will collaboration or investment, pre-

procedure for obtaining manufacturing licences and foreign technical collaboration for new products is cumbersome and machine tools requiring sophisticated technology and high investment, firms which can undertake such manufacture belong to large MRTP ("Monopoly") houses. Under the existing policies such large houses face a number of diffi-

"In certain cases, the quantities of machines required in the domestic market are so small that it may not marit their nomic manufacture. Policies to imports, customs duty and foreign collaborations are not belpful and in some cases contra-productive for further import substitution."

The Indian industry traditionally has had close ties with British, West German and American machine tool companies. At one time there were more than 125 collaboration heen reduced co-operation continues and is responsible for some notable Indian advances. Alfred Herbert, for exampla, is making De Vlieg jig boring machines at Bangalore, though probably half of the production of about 12 machines a year will be sold to America because of the small Indian market.

Collaboration

The Indian tool makers bave recognised the need for foreign collaboration and the big international exhibitions in Milan (in 1979) and in Chicago (in September) are occasions for strong Indian delegations to attend to talk to their counterparts. As a result of discussions in Milan plans were made for a delegation of UK machine tool makers to visit India this year.

However, Government sus-picions and tardiness can delay links between India and foreign almost certainly mean foreign companies. Whereas previously agreements were made for seven

WORLD PRODUCTION 1979. (\$m)

		The second secon	ï
	Country West Germany:	Production Expans 4,100 2460	101 10
	U.S.	3,890 660 E0	69
_	USSR	2,890 350	7
_	Brazil	240 33 -	36
	Taiwan	170 120	70
_	Santh Karea	150 22	40
_	Tadio	129 31	56

(Figures rounded; some include USSR estimates.) Source: American Machinist February, 1980.

to ten years, now three to five years is the official standard. To an extent the Government is jus-tified, hecause sometimes in the old deals what was important was the initial transfer of technology and little was added subsequently.

What is needed now is sufficient flexibility and fine tuning to allow continuous cooperation and the feeding in of new improvements. Industry sources complain that officials, with their addiction to magic guideline agraements with the West. figures, cannnt always appre-Though the numbers have now ciate the need for give and take.

Royalty payments are another contentious issue because, as Mr. Sulake saya: "What was found attractive about 5 per cent in the early days, when we were making shapers and centre lathes, is no longer so when we are having to import high tech-

India's own research and development effort is about 2.5 per cent over the whole inper cent over the wine in-dustry and about 5 per cent of HMT'a budget. But the setting up of the Central Machine Tool Institute at Bangalore is having an impact on improvements in Indian products. In 1979 the institute produced 23 new or improved machine tools and allied equipments.

Machine tool expents are dominated by centre lathes which in 1978 were almost a third of total Rs 135m exports. They were followed by general cutting tools, radial type drilling machines and power presses.

Industrialised countries, not-ably the U.S., West Germany, the UK and Australia, which each bought Indian machine tools worth Rs10m, are the most im-portant, though in the past few years some developing countries have come into the bottom of the export lists. These include the United Arab Emirates, Kenya and Iraq. Even so, the sbeer volume of the industrialised markets will prevent any radical changes in the pattern nf trade.

Within India there is a growing interest in the Industry. Mr. Sulakhe said that the 1979 Imtex exhibition was visited by 150,000 people, even with a Rs 5 admission cost to discourage casual sightseers. The attendance at the Chicago Inter-national Machine Tool Show is about 100,000. But the problem. as in the rest of Indian industry. is to turn the world's second most populous country into a bigger market.

Kevin Rafferty

Capital goods benefit from international competition

THE INDIAN Government's decision three years ago to liberalise imports of capital goods sent sbivers down the spines of managers of units making them in the country. Having been sheltered for nearly 30 years, there were fears that the high-cost capital goods industry would crumble in the face of international competition. A recent study shows that the fears were baseless. Even in the power equipment

industry, the main one in which imports were encouraged, it has been found that the bulk of the orders still go to Indian manu-facturers with the possible and this has adversely affected exception of specialised aquip-the growth and prosperity of ment (such as gas turbines) that is not made in the country. Machinery

the liheralised policy forced capital goods industry.
local units to lower their own This may not be immediately costs and improve efficiency.

That the Indian capital goods industry has reached maturity is conceded by all concerned. It turnkey basis (for example, by Bharat Havy Electricals), build a wide variety of vessels for defence and commercial needs (Magazon Ducks, Garden Reach Workshops and the like) and manufacture complete textile mills and sugar plants (Birkas and bost of other companies).

Single-minded

In fact, the capital goods around Rs 20bn and which dning well major users are also accounts for more than a third going alow on replacement of of the country's engineering goods exports, has produced the entire equipment needed for building up infrastructure in the country. This
was possible because of the
Government's single-minded
should be between 20 to 22 per self-reliance (mostly

ing from beavy under-utilisation modernisation and dependent for demand for their products oo Government orders industries set up in the 1950s for railways, power, construc- and 1960s.

foreign exchange).

tion, ports and ships. Imports of capital goods in 14 present is idle capacity, there sectors (in which global tenders are now allowed) has not really affected any of them, diversification They are: fertilisers; newsprint extended further and and paper; basic drugs; basic substantially. This would technical materials for pestinecessarily imply permission to cides and weedicides; power all units to produce to their

petroleum exploration and pro-duction; petro-chemicals up to the stage of polymers, manu-factorial materials handling projects at ports; sugar; cement and cement products; and 100 per cent export-oriented industries.

But there have been severe finctuations in damand from Government agencies whose investments and policies on the capital goods industry.

Machinery manufacturers, This suggests a strong case therefore, are pressing for a for throwing larger areas of the economy open to international competition, since many companies concede that minant for the future of the therefore, are pressing for a

possible since the Government has decided to scrap the Janata's Sixth Five-Year Plan and it will take some tima before the draft is now in a position to set up of the next is ready. Hence, complete power projects on a both public and private sector units view with considerable disquiet the possibility of a drop of orders since they are not being given a chance to plan ahead themselves for manufacture of plant and machinery.

Apart from fresh orders, the replacement demand is also low. The machine tools industry, for example, has advance orders for only six months instead of the preferred two years. Apart from the fact that important machine industry, with a current annual tool users like the tractor and output that is estimated at automobile sectors are not going allow on replacement of obsolete tools.

A study made recently by the Association of Indian Engineer-

pursuit of a policy for nearly cent. Instead. it is now 30 years of import substitution eatimated to be 7 to 8 per cent. On the basis that any plant because of the shortage of and equipment more than 25 years old should be replaced, a If now the major units of the census of existing units would capital goods industry, such as show that a majority needs the Heavy Engineering Correplacement on an urgent basia. poration at Ranchi, are auffer- Hence the need to stress of capacity, it is partly due to association feels, would give a infrastructural constraints but snot in the arm to the capital mostly because they were goods industry. The alternative would be rapld deterinration of

> Since the main problem at is a persistent demand that the Government's decision

generation, transmission and optimum capacity without any ing sector is in the peculiar distribution; mineral exploration, mining and benefication; not easy since it would require manufacturer and user of capital goods. is that indigenous manufac-turers feel that much needs to

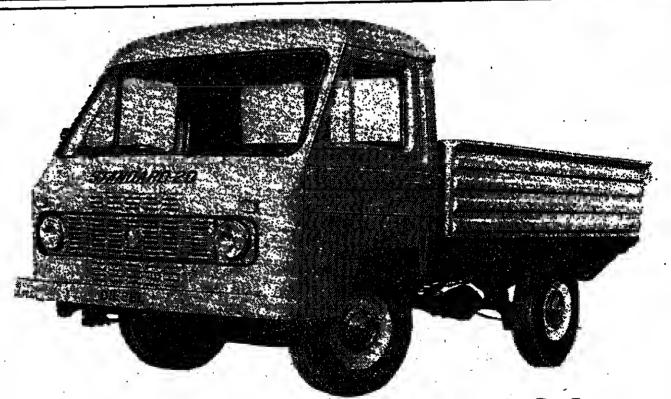
facture of professional electronic components; waste disposal and effluent treatment; costs are to be lowered.

Evaluation in the disposal force in distribution in the stabilistic industrial transfer indust costs are to be lowered.

There is currently a controversy over the future development of the capital goods industry because the engineer-

CONTINUED ON NEXT PAGE





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INDIA.

gue



Work at Bharat Heavy Electricals, Bhopal. The company has been seeking collaboration with Siemens

Confidence in power equipment companies

INDIA IS groaning under unprecedented power cuts and the avourite target for the curses of annoved industrialists and householders alike is the power Bharat Heavy Electricals (BHEL).

But while Indians profess. their lack of confidence in it, BHEL has been winning favour abroad, and last year its exports reached more than Rs 1bn (\$120m) with orders from places as distant as the Middle East, South East Asia and New

Making sense of the power situation, let alone of the quality of Indian equipment, is difficult because so many judg-ments are coloured by emotion and anger at the power cuts and

by sharp political controversy. During the previous Janata Government BHEL came in for much criticism and there was growing talk of the need to look sgain at equipment and tech

Indira Gandhi's Government the and favouritism in managerial judgment of BIFEL seems to appointments, tha poor quality bave changed almost overnight. of coal and difficulties in moving Mr A. B. A. Ghaoi Khan Choud-hary, the new Energy Minister,

foreign equipment According comes general government to the Economic Times, the policy it will be bard for the Minister said BHEL was quite country to get on top of the Minister said BHEL was quite country to get on top of the capable of meeting the demands troublesome power situation. capable or meeting the demands of domestic thermal sector and be was against any kind of import of thermal units, His Ministry bsd taken a decision in principle to discourage any that "the U.S. and India are the contract of power againment."

Import of power equipment. only two power makers in the In. this Mr Choudbary is showing a confidence in the competition." public sector power equipment maker which is not shared by really big markets in the world everyone. Senior industrialists are quick to point out that Indian power stations are working at only 48 per cent of capacity now totals 30,000 MW and the target was to add another 18,500 MW by 1983. It city—compared for example to 75 per cent or above in the UK. The exceptions to the rule in annual increases are likely public sector power equipment The exceptions to the rule in annual increases are likely India are algnificant. The long- to be considerable. Almost

time British-owned Calcutta 3,000 MW was added in the last Electric Supply Corporation is facal year. Mr. Bhargava predoing well, even as the rest of West Bangal's power stations figure will be 2,200 to 2,200 MW. are doing badly; and the companies operated by Tata Electric, largely by using German equipment, are running at more than 85 per cent of capa-

As an example of the state of the industry, Tata has been entrusted with the setting up of the first 500 MW thermal power station, for which the turbo-generator has been placed with BHEL but the equipment will be supplied by Kraftwerke Union and specifically made in Germany.

The Minister's statement laid sgain st equipment and technology from abroad, though be new generation of stations of cause of criticism BHEL's own plans for a 15-year collabora which BHEL cannot be blamed are labour indiscipline and are labour indiscipline and ere delayed.

But with the coming of Mrs. stations, demoralising patronage

Yet the fact remains that Mr A. B. A. Ghaoi Khan Choudhary, the new Energy-Minister,
gave It what the company called
"a clean chit."

Decision

The new Energy-Minister,
a clean chit."

The new Energy-Minister,
there are areas where BHEL is
weak and would benefit from
foreign belp. Indeed, by seeking collaboration with Siemens
the company Itself has acknowledged this. If the statement
of in principle discouraging
foreign power equipment beforeign equipment. According

India is also one of the few

figure will be 2,200 to 2,300 MW, but this can then be stepped up

1978-79, for example, the com-pany produced 2,565 MW of power generating equipment, and of the 3,038 MW added to India's power system that year, BHEL accounted for 2,950 MW or 97 per cent. This brought BHEL's share in India's overall power system to 36 per cent of

the installed capacity.
But BHEL is now running up The Minister's statement laid the blame for the poor performance of India's power equipment not on the makers but on operational difficulties worsened by a lack of standard training for engineers, especially at the level of state electricity boards, plus "teething problems of the new generation of stations of the new generation of stations of the like the like the level of stations of the like th against some of its limitations. This is to be expected, and after all even a developed country such as the UK had buge prob-lems with its new generation of 500 MW stations; but for a power bungry country like India there is a need to have the smoothest run possible.

Useful resource

country already spending 40 per cent of its development on power and transport, global

tenders will be insisted on. Mr. Bhargava says that international competition is bealthy. "India bad been a closed market until 1978. This mean that we were not at all exposed to international technology. The need for technology upgrading was not before us and there was a

not before us and there was a great danger of our becoming totally inefficient. While we could get away with it, we don't want to get away with it." BHEL had entered the export market in 1976 for this reason, be said.

Mr. Bbargava is pleased that of the 1,800 MW of power station orders reently put out to international tender BHEL bas won 1,200 MW. The oher 600 MW, he adda, "is unlikely to come to us." Either Japanese or Italian companies will get or Italian companies will get the orders. British, American and German makers are too costly, he reckons, even with the most competitive world position

for years. for years.

"The export market has been very tough because of a decline in orders in the developed world. Most major power manufacturers except France and India have light order books. Prices of oil-fired stations have come down by 40 per cent over what they were five years ago, and coal-fired atations by 20 per cent. They are almost procing to cover raw materials, fuel and

a bit towards overbeads." Thia stiffer international competition will probably mean that BHEL will be hard pressed to keep its exports at the \$125m level. When the present orders for Lihya, Saudi Arabia, Malaysia, Thailand, Nepal and New sia, Thailand, Nepai and Zealand are completed BHEL. still has a number of foreign contracts "but not of such good

Indeed, according to Mr. Bhargava, BHEL has already lost the opportunity of good orders in Saudi Arabia, Libya, where it has instead joined a consortium because of the delay starting the Siemens collaboration and improving its

technology.

Competition is also helping BHEL to reassess the areas of atructurals, commercial and EC its atrengths and weaknesses. As might he expected, BHEL has an advantage where Indian tech-Eventually, it is likely that nology is on a par with world standards and where the labour content of the goods is high. This meens that in boilers, built since 1971 under a collaboration agreement with Combustion Engineering of the U.S., BHEL we like aubject to the constraint

of capacity." In generators, where there is a lot of winding work, BHEL also has an advantage. But in hydro turbines Japanese prices are close to BHEL's. And in steam turbines and generators of 100 MW and above, Mr. Bhargava admits, "we do not have technology which is un to heve technology which is up to

This is why the deal with Siemens was sought: to allow BHEL to improve its technology to be able to build turbo-sets the range 200 to 1,000 MW as well as to bave an association over a longer-term to provide continuous development.

The deal invited opposition from a number of different quarters. One was the narrowly chauvinistic ground that it was not necessary for BHEL to tie itself to Siemens or any foreign company. A variant argument more specifically attacked the arrangement of such an allembracing deal for such a long time with a single company and claimed it would be better to look for variety.

The question was shunted between committees and a committee of four Permanent Secre tarles edvised rejection, advice wblch was itself rejected by a later committee of nine Permanent Secretaries which thought the Siemens link should go ahead. It now awaits the new Government's blessing.

Another area where Mr. Bhargava believes that BHEL is strong is in supplying to other developing countries. "We have the advantage of more proxi-In stations assisted by World mate knowledge of conditions Bank loans, a useful resource to and problems and what these be offered to another develop-ing country. In addition 100 MW stations differ from 500 MW 1.200 MW ones-which is what the industrialised suppllera have graduated to-in terms of sophistication, expertise and maintenance. And coping with breakdowns is part of the learning process," Mr. Bhargava said with a smile.

BHEL bas already shown its muscle in developing country bidding. It won the turnkey contract to enlarge the Tripoli West power station by 240 MW (2x120) against bids from Germany, Switzerland, France, Japan and the UK. Sometimes there is a political alement from which India can benefit. Thus though BHEL does not make gas turbines the Saudi Arabian Government invited it to bid for a gas turbine station after rejecting Western blds.

Strength

Power engineers working outside BHEL did not dispute Mr. Bbargava's account of the public aector company's technological strengths and weaknesses. One said: "As far as static equipment is concerned, like transformers and cablea, there is absolutely no problem. Where they are having difficulties is in retailing conjument and in rotating equipment and in building up systems. They lack the experience and underesti-mate the problems and the time needed to stabilise the new stations."

But the same engineer pointed out another danger: that of concentrating India's power and export hopes on one giant company. With its 60,000 employees and annual sales of more than Rs 6bn BHEL is entering the medium to hig lesgua on a world scale. There should still be room, such pro fessionals argue, for new companies to move and supply a competitive element, especially important when the big com pany is in the public sector and therefore open to politcial pulls as well as to economic and social ones. Open competition and its bracing effects should begin at home.

To some extent this is happening. Smaller companies, such as Crompton Greaves, NGEF and Tata, continue to export, though their share of the power equipment market is only 20 per cent. Now NGEF, a maker of electric motors. transformers and switchgear, is heing helped hy technology from AEG, and experts outside BHEL say it is heginning to

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Why don't you get on tha lina or write to CMC if you want someone raally raliable to lonk after your system in any part of tha world. Or for any computer assistance.

Juat talk to Anil Laud.



Capital goods

CONTINUED FROM PREVIOUS PAGE

With the Government's and points out that the principal decision to liberalise some reason for the high cost is the imports, there is pressure to heavy excise and import duties extend tha list so that the on raw materials.

The cost of copper for an exchange reserve position is sound. On the other band, the policy has not been availed of (except in the power equipment).

The debate continues on the basis that the capital goods industry is full of idle capacity within the country. The other view is that exposure on a selective basis to international standards and competition in to improve the quality and price capital goods will hinge on the of Indian goods and therefore degree to which Indian units the domestic market would belp improve the capacity to export.

ixties.

20 Micro Leaf

Standard Meta

Prockers of

of Diesel

india Led

et sensation bi But there is unanimity over the view that imports should be freely allowed when there is a sudden upsurge of demand (again the power equipment example) or when there is need for a higher range of products for which capacity has not been

The ALEI study concedes that the indigenous capital goods industry is high-cost. But it puts the blama on the Government and its taxation policies

cexcept in the power equipment sector) to the extent thought possible and there are some doubts over how far Indian industry itself is willing to look outside.

The debate continues on the basis that the indian industry itself is willing to look outside.

The debate continues on the basis that the indian industry itself is willing to look outside. true that some raw materials

grade aluminium-are cheaper than elsewhere in the world. the dabate over the import of

are able to specialise.

The view is gaining ground that India should concentrate on manufacture of s few items in can "secure as many orders as which it has natural advantages and that the emphasis should shift from earlier import substitution to export expansion with units baving economies of scale. This commends the view that Indian entrepreneurs should have within their range not only just India but the entire world.

K. K. Sharma date."

keep the public sector giant on

its tocs.
There could be good opportunties for more such deals with foreign technology to assist smaller but challenging companies, but their scope depends on the new Government keeping

Kevin Rafferty

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in the bag, isn't it natural for STC to be another name for International Trading?







Electronics targets a mixed blessing

ability to produce silicon chips, such as traosistor sets. circuits, software and other India produces about 0.5 per great status. What particularly irks India

is that it has been left behind not only by the industrialised West — which is to a large degree understandable, given its present rate of development but it also labours far bebind many Third World countries in achievement. There is some pique that countries such as Taiwan, Hong Kong, South Korea and Singapore bave all forged ahead.

There are now plans to hoost home production of certain lines, but achieving the targets may be a mixed blessing. Some of the targets are so grandiose

that there is no domestic indus-try which could absorb the pro-jected output.

India's problem is that its domestic market is amali. While such countries as Switzerland have proved with watches that it is not necessary to have a flourishing bome market in order to sell abroad, there is no doubt that most industrial countries do develop products at home and export on the back Such a policy is difficult in

estimated that just over half the population of 634m bas a stan-dard of living below the poverty level. And the poverty level in India was put in 1978 at Rs 65 (about £3.50) a month in the rural areas and Rs 75 (about £4.15) in the cities. With the wages of a farm

Rewinding a motor stator at the ICI Alkali Chemical

Corporation of India at Rishra, Bengal

PROFILE: BHARAT ELECTRONICS

Recognition

from abroad

neadquarters at Bangalore, the

The management was over-oyed. "It shows that we are

Launched in the 1960s essen-

Tha company now sella TV

standing on its own financial feet. (Net profits for 1979-80

rest from a shara issue. A

further proposal for setting up

a unit to make shells, involving an investment of Rs 250m, is

being examined by the Govern

ment, which will provide all the

Bharat considers exports vital

to its health. Apart from the

fact that they improve its

balance-sbaet, it feels they

generate confidence among

foreign concerns in its capa-

bilities. Many bave approached

Bbarat to accept suncontracts; these include European groups

like Contraves which want not

only joint production hut also

co-operation in research and

The Europeans have won so

(especially defence con-

many contracts from the Middle

tracts) that they do not have

the capacity to carry them out.

Their search for a reliable

foreign partner has led to Bharat. "The 1980s look

very attractive for ua," says

Bharat has developed all the

modern communications in usa

in the Indian Army, Air Force

and Navy. Its representatives

are reluctant to disclose items but say proudly that they are

being exported to the Middle

East as well as to Europe.

The latest is an order from

development.

Mr. Krishnan.

Confidence

expected to be about Rs 100m.) A quarter will come from the Government and the

IF THERE is one industry that from 3p to 30p a day, there is anxious glances are being east India would like to expand to not a great deal of scope for at the policy on stimulating world scale it is electronics. The selling more consumer durables village industry. The previous

to guided weapons, is seen in electronic goods and accounts the sub-continent as conferring for about 0.3 per cent of world exports. Last year exports were worth £22m. By comparison, Japan, the world leader, sold abroad electronics goods worth nearly £500m and the combined overseas sales of South Korea, pore reached £250m. This gives

Bureaucracy

If the Government is serious about its intention of giving India a place in the sun there are certain things it could do imediately which would not cost a rupee. First, it could aholish some of the layers of hureaucracy which do so much to stifle business. An application to undertake almost any project has to be authorised up to half a dozen times by different organisations, with the result that a planning decision can take aa long as five years to

The Government replies that it does not refuse all that many. But a long time gap between application and authorisation India because of the low stan-dard of living endured by so can play havoc with financial many of its people. It has been projections and inhibits businessmen from even putting forward applications.

There is also a feeling quite widespread in industry that too little appreciation of the elec-tronics industry is held within the Government. This is more a criticism of the Civil Service than the present Congress labourer, for instance, ranging Party administration

Janata Government was thought to be blased against heavy equipment, from television sets cent of the world's output of industry and large-scale industry, wanting instead to boost production in the villages.

It is still not clear how far Mrs. Indira Gandhi, the Prime Minister, will go in reversing this policy. Village production is on much too small a scale to bring costs down in the elec-Hong Kong, Taiwan and Singa-pore reached £250m. This gives some idea of the magnitude of output in many fields. On top the problem facing India as it of this, there are heavy duties seeks a place among the world's on imports, especially electronics goods, making their use in the country expensive.

Further, there is a feeling that the Government is antipathetic towards electronics, believing that high technology would aggravate the already serious unemployment problem and that, anyway, who wants more television or wbo wants colour television?

One sector that is exempted from this feeling is that part of the electronics industry which is producing for the defence aector. In the wake of the Russian invasion of Afghanistan and the American decision to re-arm Pakistan thera is likely to be a fresh look at the needs of the country's defence forces. Much of its equipment is out-dated: if it is to keep a modern army and air force then it will have to give them more sophisticated equipment.

India is certainly aware of its shortcomings. And it is considering what to do about them.

The Janata Government set up a committee to investigate the industry in December, 1978, under Mr. Mantosh Sondhi. Secretary in the Steel and Mines Miniatry, and the committee's recommendation that the Electronics Commission should be replaced by inter-departmental boards caused something of a surprise.

It has been generally admitted that the Commission has held up the decision-making process. But the merit of the Commission is that it has scientists and technicians on its staff, and to replace it—and them—with more civil servants might com-pound the problems that people want to eliminate.

Concessions

The Soudhi committee took a bold view on imports, advocat-ing virtually open entry of finished electronic products and technology and advocated further foreign investment in the country, as well as liberal tax concessions for the private

denied electronic components chean rates and that research development were heing back. particular, a worry that growth in the components sectors was particularly slow compared with, for instance, that in electrical equioment.

The important factor now is the reaction of Mrs. Gandhi's administration to the report The main recommendations run counter to the policy of selfreliance in science and technology which the Prime Minister bas always urged. But the need for remedial measures are now so essential that it is

possible Mrs. Gandhi will accept some of them.

In ona field considerable progress has been made. That is the establishment of a freetrade zone at Santa Cruz, outside Bombay. The Santa Cruz Electronics

Export Processing Zone (commonly called Seepz) was set up in Saptember 1974 following a government decision four years' earlier that electronics was an area where a high growth rate in exports could be achieved.

Thera bad baen a free-trade zone at Kandala, north of Bombay, some years before but

its port facilities were poor and

the link with the airport indifferent, limiting both its success and its potential.. Of the 100 acres at the Seepz, Bombay, site, half have already been developed; 47 projects have been approved and 33 of them are in operation. Among the companies operating are Intersit, a leading integrated circuits producer, 90 per cent U.S.-owned: Tata-Burroughs; Systyme, 95 per cent UK owned; and Binatone, 96 per cent UK owned. Most of the companies bave American antecedents though there are others from France, Denmark, Switzerland, Italy, Hong Kong and two from

Dispensations

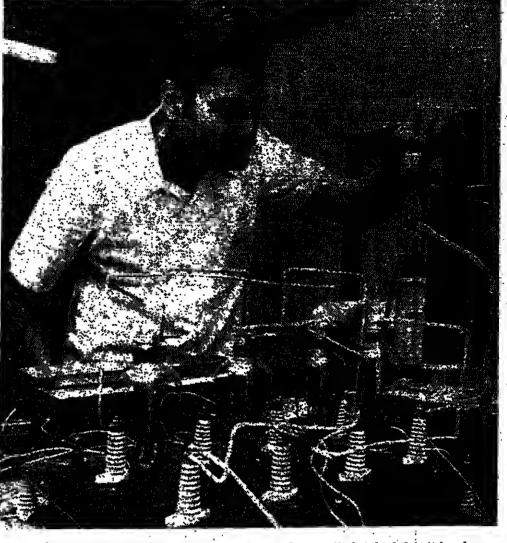
The advantages of a free-trade zone are that all the goods pass-ing into it are free of import Behind the setting up of the duties. There is a total waiver committee was a feeling that the private sector was being capital goods, exemption from customs duties on raw materials, exemption from any State of national taxes and special dispensations with regard to certain local laws.

The intention is that all the goods produced should he exported and so boost India's foreign exchange earnings. The country envisages 4.7 per cent growth in the sixth national plan between 1976 and 1983 and so India is looking for 7 per cent growth in exports.

Seepz'a contribution so far is minimal. In 1979-80 exports from it are expected to reach about £5.3m and in 1980-81 they could go to about £6.5m. This will not contribute very much to the aixth plan. .

But Seepz is a start. And it is a welcome move because for once the layers of bureaucracy have been stripped away and decision taking can be reached quickly—within weeks rather than years. A more serious problem is that other industries have begun to ask why elec-tronics should bave been given such preference. This is the sort of problem that any government would welcome.

Authory Moreton



Work at the Indian Institute of Technology, Bombay. India is irked that it has been left behind in the electronics race by many countries

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Drug shortage stems from price policy

INDIAN DRUGS are among the cheapest in the world, according to a recent study conducted by the Organisation of Pharmaceutical Producers of India

Despite the escalating costs of raw material inputs and packaging materials caused by OPEC's petroleum price rises,

OPEC's petroleum price rises, prices of end products have been rigerously held down by Government policy, resulting in an acute shortage of many essential and life-saving drugs. The drug industry has been clamouring for months now for the aituation to be rectified. It points out that profitability of the industry and particularly the multinational drug companies, has come down steeply. This has come down steeply. This has had a major impact on new investment in the industry.

Yet considerable expansion has to take place if the Covernment's production targets are to be met. Production of bulk drugs today is about Rs 2,000m (£109m) and this must increase to Rs 4.750m in 1982-83 to satisfy requirements. This does not include estimates of Rs 1.500m in imports by that

The current output of formulations is around Rs 10,000m (£549.4m) and the Government wants this to increase Rs 18,750m in 1982-83.

So priority is being given to the price question by the Ministry of Petroleum and Chemicals with the idea of encouraging higher production to meet future requirements. An announcement of bulk drug price increases is expected within the next few weeks. Formulation prices will necessarily have to go up as well.

Guidelmes

However, not all drugs will be subject to the same increases. Essential drug prices may still be artificially depressed while non-essential drugs are allowed

large percentage increases. Guidelines for the price in-creases were laid down in the 1979 Drug Price Control Order. which has still to be implemented. It allows for a 12-14 per cent return on net worth in the case of bulk drugs and an 8-10 per cent return on net worth io the case of formula-

profitability obtainable in for fertilisers, cement and other \$4.27. industries here," explains a To drug industry sources.

The level of equity foreign drug companies will be allowed to retain is also to be decided shortly. Much depends on how much their processes involve high technology.

. Eight foreign firms manufacturing formulations and making no bulk drugs have been asked to reduce their foreign equity holdings to 40 per cent under the Government's new drug policy. These companies are Beecham India, Abbot Labora-tories, Anglo-French Drug Company, C. F. Fulford, Indian Schering, Smith Kline and French, Nicholas India and Carter Wallace.

There are 24 foreign firms producing one or more bulk drugs. Studies of their 207 processes by the high-leval Government Committee on Dilution of Foreign Equity, which was set up in April 1975, showed 93 involved high tender which was set up in Apple 100, showed 93 involved high technology. Two of these 24 companies have been asked to bring down immediately their foreign immediately their foreign equity to 40 per cent. They are Richardson Hindustan and Whiffens. Another company, Subrid Geigy has already divested itself of its entire foreign holding.

foreign holding. There are 21 companies left, including giants like Glaxo, Sandoz and Park Davis, where permissible levels of foreign equity have still to be decided.

The Government Committee on Equity Dilution, looking to the future, has laid down general guidelines for assessment of drug technology for when foreign companies apply for industrial licences. The major objective appears to be the eventual Indianisation of all foreign drug multi-nationals.

way since the 1940s, when most of the bulk drugs were imported and only processing and formulations were carried ont in the country. Now most of the bulk drngs are manufactured indigenously and India ranks second to Brazil in drng production in developing countries.

of many developing countries, were making," said Dr. Behl. \$1.6 compared with China's \$3, "This is a poor country and

To reduce bulk drug imports and encourage orderly development of the industry, two public aector projects were set up — Indian Drugs and Pharmaceuticals Ltd (IDPL), which now accounts for 40 per cent of the conntry's production of basic bulk drugs, and Hindustan Antibiotics. The public sector now provides about 20 per cent of the total bulk drugs and formulations produced in the

"Although all the top
Western drug manufacturers
were here, they were mostly
producing the formulations,"
explains IDPL's chairman and
managing director Dr. K. L.
Bebl, "IDPL filled the gap in
production of bulk drugs." production of bulk drugs."

Today, the public sector provides less than 10 per cent of formulations, but expansion plans being put into effect should double this market

Dominant role

The Soviet Union played a dominant role in providing tecbdominant role in providing teconology for the manufacture of
antibiotics and sulphur drugs
in the early years under agreements signed in 1962, and also
provided for the training of
indian personnel. However,
IDPL points ont that the levels
reached by the Russians in drug
technology are far from those
reached by the West, and that reached by the West, and that in future it will have to depend more on itself or look beyond the Soviet Union for the latest

know-bow. For its synthetic penicillins, Erythromycin and D-oxycycline. IDPL went to the West. How-ever, the Indian drug manufac-turers resent the fact that Western companies keep tech-nology transfer at limited levels and so keep them "eternally India, in fact, has come a long

As IDPL began producing different drugs and formula-tions, prire levels huoyed by the multinationals, started dropping dramatically. The price of tetra-cycline capsules, for instance, was cut by two thirds despite a doubling in the bulk price of the material. "So you see bow However, per capita the material. "So you see bow consumption is still half that much profit the multinationals."

in for instance, or Malaysia's people cannot afford to pay ose prices."

In certain cases, a number of IDPL's 150 formulations are being supplied to Government much lower rates than marke

tion of 55 hasie drugs (and the development of technology for 30 more by its R and D division) IDPL is now able to offer its consultancy services to other developing countries.

In Algeria, for instance, the company is providing technical up projects in the chemical-pharmaceutical sector. In return for this help, and consultancy advice in other fields, Algeria bas agreed to consider an Indian request for the supply of oil on a long-term basis under longterm credit arrangements.

IDPL's export of knowhow to Algeria is particularly significant in view of Algeria's previous dependenre on assistance from the West in core sector

IDPL is also assisting Royal Drugs of Kathmandu, Nepal, with detailed engineering and supervision services for produc-tion of formulations. The company hopes for more sncb consultancy work and has offered assistance in setting up pharmaceutical plants in Thailand, Afghanistan, Iraq, Abu Dhabi, Guyana and Nigeria. It the West Asian market, but bas so far had no positive response.

IDPL is currently doubling the capacities of its synthetic drng plant at Hyderabad and its antiblotics plant at Risbikesh to 3,866 tonnes a year and 548 tonnes a year respectively. Work should be completed by the end of this year and other units are coming up. Some new anti-blotics apart from its present product mix—synthetic penicil-lins (Ampicillin, etc.) and Erythromycin—will start being produced at Rishikesh by the middle of rhis year.

The company is importing the latest technology for its Rishi-kesh plant for production of potassium penicillin, synthetic penicillins, tetracycline, Erythromycin and D-oxycycline in bulk form from Farmann of Italy.

Pearl Marshall



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Oil imports becoming an impossible burden

INDIA's foreign exchange reserves, rising steadily for the past four years mainly because of remittances from Indians of remittances from Indians of crude at official venezuela, and even China for of remittances from Indians working abroad bave absorbed OPEC rates than at the bigh new sources of supply. The the impact of the beavy oil spot prices that an emergency situation will have to be import hill. This has led to a would require (as it did for watched from year to year (posthat has hidden the real nature of the near-impossible burden of oil imports.

in 1979 and could go as high as Rs45bn this year if OPEC prices continue to soar, the reserves are finally dipping. By the end of the year the oil imports could make such a dent in the reserves that the compiacency that their size bas given rise to could be shaken off quickly.

sive 45 per cent of total export earnings and so easily constitute the single largest item in the import bill. If the trade deficit reaches the expected Rs20bn in the current financial year, it will be due mainly to oil imports (and, of course, other reached like invents taken with ports (and, of course, other negotiations are in progress to commodity imports taken with the slow growth in exports this needed. Suppliars include the year). This is despite the fact. that, for India's size and indus-trial position, consumption is surprisingly low at roughly 30m tonnes a year, which puts the sub-continent in tha lower league

of Baroda

of oil purchasers.

Of this, roughly a third is actually produced within the country in on-shore fields in the north-east and in Gujerat as well as the recently developed off-sbore finds in the western continental shelf. Efforts are being made to increase internal production but these require heavy investments and have been set back by local polltical tronbles in Assam where production came to a near standstill recently because of picketing by local people over the issue of registration of "foreigners" in the electoral rolls.

This will undoubtedy blow over and, it is hoped, oil production will return to normal. But it serves to remind planners of the continuad dependence on imports, a dependence that is so heavy that the turmoil in Iran and the fall in production internally has left the country with an alarming shortage of diesel and kerosene fuel that is harming both industrial and agricultural production apart from aggravating transport diffi-

culties.
Therefore, willy nilly, India must continue to look outside for its oil needs. The constant efforts of officials in the Ministry of Petroleum are to ensure

Largely because oil imports, about 20m tonnes of crude will need to be imported plus which were worth about Rs28bn in 1979 and could go as high as Rs45bn this year if OPEC prices production of processed production produc may have to be raised and this nationwide seismic survey has is a constant worry. Yet if the been made with the help of Ruseconomy is to be gingered up, sian exparts. Provisional figures imports of crude and petroleum products are unavoidable and so Oil imports in 1979-80 are the search for reliable suppliers 238.74m cu. metres.

Negotiations

Mr. P. C. Sethi, Petroleum Minister, says that so far agree-ments for the supply of 15.5m tonnes have been firmed up and traditional sources such as Iran, Abu Dbabi, Iraq and Russia, but feelers are being made to countries lika Nigeria, Indonesia and even Mexico while Saudi Arabia is expected to make its normal contribution of 1.1m tonnes.

Even Libya, while last year suspanded supplies because of differences over interpretation of the agreement with India for exchange of nuclear knowhow, is expected to resume ahip-

But the Iranian crisis, which at one time threatened to result in the closure of a number of Indian refineries, bas caused so much worry that the Indian Government will not feel really safe unless more than the required quantity is tied up. Hence, the continued efforts to

cultivate the Arabs politically. So far, the higgest slice has come from Iraq-which provided 6m tonnes last year and has promised the same amount this year, filling the gap caused by Iran—and this remains the most reliable source since poli-tical relations between Baghdad and New Delhi have improved swiftly.

But there is evidently a feelcrisis and the pressure on India to accommodate Pakistan.

sibly month to month) for a long

Conscious of the need to minimise dependence on imports, the Govarnment has decided to intensify efforts to increase production from India's own fields. There was a debate in pro-

gress over whether the reserves should he preserved until OPEC prices become impossible for the country to pay. The debate ended abruptly when OPEC prices rapidly reached this level last year. The decision to conserve the reserves has been quickly ahandoned. Planners are now agreed on the need to tap whatever oil is possible, especially as India's already critical energy situation has been exacerbated by electricity generation problems owing to constraints on coal

The exploration is being done by the Government-owned Oil and Natural Gas Commission (ONGC) which is operating in the offshore regions of the western continental shelf—where important fields like Bombay High and Bassein have heen found—and onshore in Guigrat Oil India owned Source of energy, is in short supply, reliance on oil cannot be avoided no matter how much the strain on the foreign exchange reserves and howsover much OPEC raises its prices.

Mixed luck

Hopes must therefore be Gujarat. Oil India, owned jointly by the Government and Burmah Oil, operates in North-East India, although it recently won an offshore concession in the Mahanadi Basin in the Bay of Bengal where operations have begun.

and onshore fields last year was about 11m tonnes, of which Bombay High accounted for about 4m tonnes. This is India'a find, also in the western conmost dramatic find, which was developed within three years of oil being struck in 1975. Sinre as big as Bombay High and the duction from this expensive about 7,000 barrels a day. More source has been reversed, heavy wells are to be drilled to detering of uncertainty about other source has been reversed, heavy wells are to be drilled to detersources. Saudi Arabia is a in progress to limited supplier and could prove ensure the maximum possible nagiri but, no matter bow proerratic because of the situation output from Bombay High and mising this proves to arising out of the Afghanistan the structures in its vicinity. exploration successes have to The current throughput of about 100,000 barrels a day is to be Iran, which should be the raised to a high 140,000 barrels main supplier, is equally uncer-

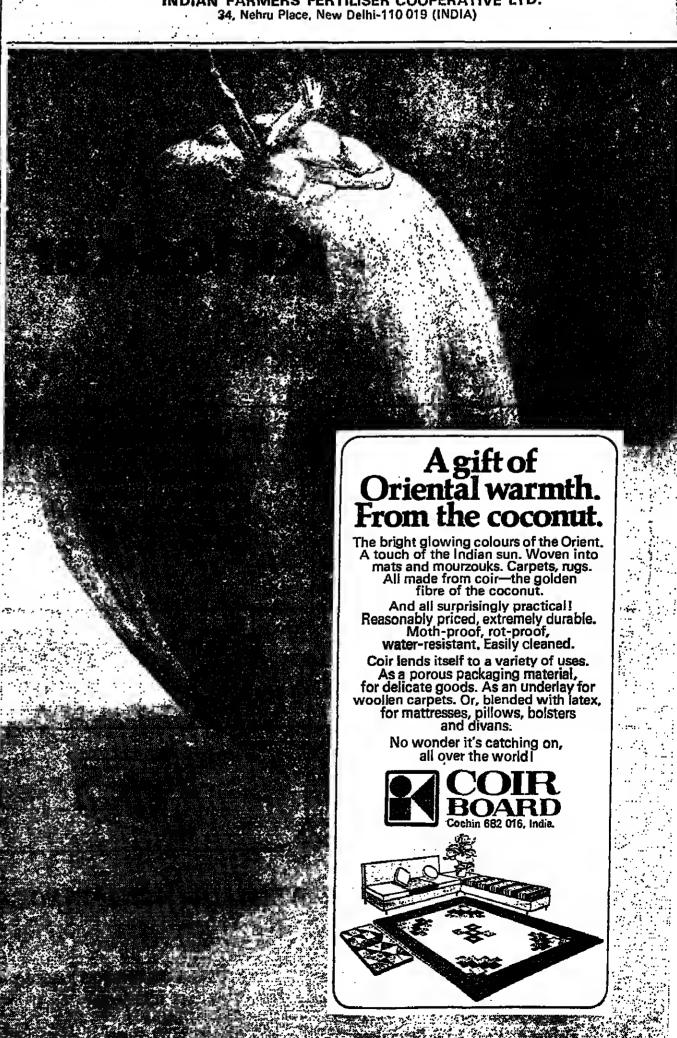
According to the present schedule of operations of ONGC, the production level by May, 1982, will reach its peak of 12m tonnes a year—which is substantially higher than the 10m tonnes estimated earlier— by the mid-1980s. This optimum level will be maintained for some years until the reserves there are exhausted, and this should belp to meet at least half the country's needs at that time. Production from Assam products, such as diesel. It the production of processed products in the eastern refineries continues to decline, imports may have to be raised and this is a constant worry. Yet if the been made with the help of Russel and the production from limits own helds. In the continues to decline, imports may have to be raised and this is a constant worry. Yet if the been made with the help of Russel and the production from limits own helds. In the left of the continues own helds. In the left of the limits of the left of the

been made with the help of Russian exparts. Provisional figures of crude reserves are 310.37m India's bopes to meet even more than half its crude needs hy 1952 may not be too optimistic. The trouble is that consumption is difficult to curb. The only restriction possible is on petrol which, in a country still in the bicycle age, can be saved only marginally in overall terms. The bulk of consumption is from either industrial users of furnace and fuel oil and naphtha or from agriculturists who need middle distillates such as diesel to fuel their irrigation In fact, despite all efforts to

limit it, consumption is rising at a minimum rate of 9 per cent year and this is ominous. Since coal, the main other source of energy, is in short

Hopes must therefore be pinned on finding new fields quickly and exploiting them as rapidly and successfully as Bombay High. Unfortunately, India has had mixed luck with oil discoveries. Gujarat and Assam are throwing up new oll-yielding wells as soon as Total production of offshore others become dry but explora-nd onshore fields last year was tion in other states has not yielded results so far. Last November, a new major

the decision to slow down pro- first exploratory well is yielding increase if oil is to he less burdensome for India



Setbacks in fertiliser output

tunities to participate in amount of crop acreage planted, fertiliser plants in the Gulf and therefore affected fertiliser States and overtures have been going on for some time now with three or four countries. Any deal would include "buy-back" arrangements so that India could help satisfy its large and continuing requirements for fertiliser imports.

nitrogenous fertiliser sbortages of more than 1m tonnes annually will continue well through the 1980s. They point to the higher prices of imports and escalating shipping freight charges.

India's demand for nitrogenous fertiliser this fiscal year has been about 3.7m touries. The four new fuel oil-based plants commissioned this fiscal production barely reached 2.4m tonnes, despite an installed capacity that has rapidly increased from 3.255m tonnes six months ago to 4.5m by the end of this month. The difference between consumption and production means, in effect, a 35 per cent dependency on imports.

In five years' time (1984-85) the total annual nitrogenous fertiliser capacity will amount to about 6.5m tonnes but if plant operation continues to be dogged by the present overwhelming constraints, produc-tion will amount to only 4.5m. As demand will also be around 6.5m tonnes at that time, India will face an import requirement of about 30 per cent, or 2m

Optimistic

But this assumes that the nitrogenous plants will still only be running around 69 per cent of capacity, the highest utilisation rate reached so far. If optimistic forecasts of an 80 per cent capacity utilisation by that date by the Ministry of Chemicals and Fertilisers are to be accepted, then imports would need to supply only 20 per cent

of consumption (1.3m tonnes). production bave been enormous As Dr. S. S. Baijal, chairman of the Fertiliser Association of Broach plant based on fuel oil. India (FAI), put It, there has been a "jarge scale infrastruc-tural failure" including sbort-ages of power, coal and transport. The result has been a setback after four successive years of large Increase in production and consumption.

The country's worst drought

usage, but also dramatically lowered reservoir levels and caused problems in hydroelectric generation. In addition, labour unrest in

India's north-eastern oil and gasond continuing requirements for producing region led to fuel scarcities. Coal production was also way below expectations and thermal plant operated at only 46 per cent of capacity instead of the planned 55 per cent.

Because of these factors, various states imposed a variety of power cuts on industry ranging up to 100 per cent.

year, Panlpat, Nangal, Sindri and Bhatinda, have been hit by aevere shortages of fuel oil. Steep power cuts imposed by the Uttar Pradesh government have all but shut down the public sector Fertiliser Corporation of India's Gorakbpur plant (naphtha-based) and Indian

Explosives' Kanpur facility (also naphtha-based). Both of the country's coal-based plants—Ramagundam in Andhra Pradesh and Talcher in Orissa-have suffered commisshortages but went into production officially on January 1 and 4 respectively. The Talcher plant (228 000 tonnes nitrogenous capacity) had to be shut down completely for a one month

period after trials in September. India currently has 32 nitrogenous fertiliser plants listed as being in commercial production by the end of this fiscal year, although several of them may not in fact be pro-ducing because of the

constraints. Another two are due on stream later this year— Hindustan Fertiliser Corpora-tion's Haldia plant based on fuel oil, and Rashtriya fuel oil, and Rashtriya Chemicals and Fertilisers' Trombay plant in Mabarashtra The constraints this year on based on natural gas-and June, oext year, should see operation of Gujarat State Fertilisers' Future plants are being trial policy, just noises."
planned around gas from The general view is that

amount of crop acreage planted. storage.

Much depends on economics. The coal plants are more expenis cheaper.

Miniatry official.

Bombay High gas have been cleared by the Indian Government's investment board and the Cabinet. Total costs. run to well over £1.5bn with a foreign exchange component of the UK and Japan are helping with financing.

Plants for two other amailer units in the States of Assam (Basedon gaa) and Uttar Pradesb (Basedon naphtha) are also moving forward.

instance, that is now in cold Maharashtra by Rashtriya storage.

sive to build, but the feedstock tilisers Co-operative (IFFCO).

cneaper.

The design will be by C. F.

"If they run as well as the Braun of Alhambra, California.
Shased plants then they rull." gas-based plants, then they will However, the Thal Vaishet pro-be economic," says a Petroleum ject is now undergoing coosiderable delay while the Petroleum Of the gas-based projects, Ministry renegotiates the confour 1,350 tonnes per day sultancy fee and cost of tech-

Tenders

Tenders of four or five inter-national companies for technology and consultancy work for Thal Valsbet's three 1,500 tonnes per day streams of the urea plant are also being reviewed. The original bidders included Chlyoda of Japan, Foster Iso moving forward. Wheeler, Humphreys and the gas will also be carried Two of the giant plants will Glasgow, and Kellogg of the UK through a Rs 7,500m pipeline

INDIA IS looking for oppor- in 60 years not only reduced the Korba in Madhya Pradesh, for be set up at Thal Vaishet in and UHDE of West Germany.

chemicals and fertilisers, and is concerned, "we are now Pradesh the other two at Hazira in Gujarat by Indian Farmers Ferdul Pothen, IFFCO's managing future fertiliser plants, including Co-peraitive (IFFCO). facturing fertiliser by 1983." The complex will not be totally completed, however, until the first half of 1985.

> The Government also proposes to set up six more 1,350 tonnes per day fertiliser are concerned, production will plants in the next 10 years on be around 0.78m tonnes this the west coast utilising natural fiscal year (1979-80) compared gas from Bombay High and with the expected 0.84m tonnes.

set up to evolve a distribution pattern for the Bombay High gas are currently being exment Board in New Delhi.

Apart from benefiting the Maharashtra and Gujarat plants, the gas will also be carried through a Maharashtra and Gujarat plants, the gas will also be carried through a Maharashtra and Gujarat plants, the gas will also be carried through a Maharashtra and Gujarat plants.

system to the states of Madhya But where the Hazira complex Pradesh Rajastan and Uttar

> already approved, with captive coal-based units. The coal boilers will be designed to operate on natural gas in emergencies.

Where phosphatic fertilisers

South Bassein.

Recommendations by a Petrohas stayed roughly the same as
leum Ministry working group 1978-79. Yet phosphatic fertiliser production increased 15.7 per cent in 1978-79 over the oregions year, dua mainly to better performance of some of the existing units (capacity ntilisation

Pearl Marshall



Nitrogenous fertiliser shortages are expected to continue in the 1980s. Urea plant at Ahmedabad,

Scope in petrochemicals projects

JUST WHEN India will launch and power. Oil price increases the three major petrochemicals and their effect in naphtha projects envisaged in its now prices (a 145 per cent spurt in defunct aixth development plan is uncertain.

"They require a lot of invest-ment [\$2.5bn] and then you have to promote the market," demand. says a Petrolaum Ministry official. "Certainly there is no rush-not like on the fertiliser industry front, for instance. At the moment we are much more concerned about kerosene and diesel supplies."

Former National Planning Commission member Raj Krishna, adds: "Since Charan Singh's Prime Ministership there has been no decision making and this continues. The Planning Commission has been dismissed and the sixth plan acrapped. There has been a general economic policy holiday -no plan, no budget, no indus-

on the west coast, and decisions of further coal plants will be lated in a heyance until Ramagundam and Talcher have proved themselves.

There is a coal project at many demand projections in the petro-chemicals sector have shifted likely to be 200,000 tonnes LDPE. 80,000-100,000 HDPE, 200,000 PVC, 60,000 There is a coal project at particularly coal, steel, cement original sixth plan, which was with foreign equipment mann-

the exfactory price of naphtha last August for instance) have also increased downstream product prices and dampened

The most exciting of the three planned projects is the \$1bn or more complex involving a 500,000 tonnes a year ethylene plant based on Bom- 200,000 tonnes of xylenes. bay High and South Bassein gas, or its alternative, two smaller units (300,000 tonnes and 225,000 tonnes per year).

Two States are competing for this gas and both State companies - Maharashtra State Petrochemicals Corporation of Bombay and Gujarat State Petrochemicals Corporation of Ahmedabad - have contracted Engineerings India of New Delhi to prepare viability studies identifying product

for recovery of propylene from ment and private research off-gas at four public sector organisations. International refineries, which would allow a phenol capacity of around 40,000 to 59,000 tonnes as well as a 2-ethyl bexanol capacity of 40,000-50,000 tonnes and the processing of 6m tonnes of Bombay High crude at two refineries to produce around 300,000 tonnes of henzene and

Participation

Certainly, when the projects are ready to be funded, there will be plenty of scope for foreign process licensors and engineering contractors.

India's philosophy on foreign participation in its petro-chemicals industry became clear during construction of its one and only major public sector petrochemical complex in operation at the moment, the \$500m Vadodara facility in the north-western State of Gujarat. It was formally inaugurated last March.

Indian companies worked

process licensors provided the minimum basic package and gave support assistance for

detailed engineering.
The licence for IPCL's DMT process, for instance, was obtained from Dynamit Nobel of West Germany, through Krupp, while the basic engineering was carried out by Krupp. But the detailed angineering, procurement and construction supervision was undertaken by an Indian public sector enterprise. Engineers India and another Indian concern. Bharat Heavy Plates and Vessels designed and fabricated some of the equipment such as distillation columns, heat ex-

changers and pressure vessels.

Dr. S. Varadarajan, chairman and managing director of the operators, Indian Petro-chemicals Corporation, describes Vadodara's inauguration as the "coming of age" of organic one at the letter of intent stage. chemical technology in India. The Bongaigaon refineries and The construction provided a petrochemicals complex in fillip to the country's entire Assam in north-eastern India engineering and fabrication has a 45,000 tonnes capacity industry. Some 60 per cent of in DMT plant (already let out to

was supplied indigenously, 95 (already under construction) per cent of the electrical equipment and 45 per cent of the polyester staple fibre plant. instrumentation.

Naphtha cracker

The naphtha cracker, licensed from Lummus UK, has a capacity of 130,000 tonnes a year ethylene, 38,000 tonnes polymer grade propylene and 33.240 tonnes of chemical grade propylene. Licensor for the 63,900 tonnes a year pyrolysis gasoline hydrogenation unit was the Institute Francais de Petrole, In association with the Indian Institute of Petroleum, while Universal Oil Products of the U.S. was licensor for the 23,600 tonnes benzene extraction unit and the 22,000 tonnes butadiene extraction unit.

Apart from Vadodara, the Government has two more public sector complexes under way, one under construction and

to have run from 1978-1983, call facturers and various Govern- the total machanical equipment Krupp Koppers), a refinery

As for the second project, the Haldia petrochemical complex in West Bengal, a Petroleum Ministry spokesman said that there was talk now of independent financing, with collaboration

"This is because tha State Government wants it as its own project, and does not want central government involve ment," he explained.

West Bengal Industrial Development Corporation has appointed C. V. Braun, working with Industrial Consulting Bureau nf. New Delhi, to evaluate bids for the various units that have been received from companies in West Germany, the UK, France, Italy and the U.S. Products will include 62,330 tonnes a year ethylene, 45,000 tonnes pvc, 30,000 tonnes high density polyethylene, 3,000 tonnes ethylene oxide, 12,000 tonnes ethylene glycols and 25,000 tonnes ethl hexanol.

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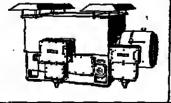
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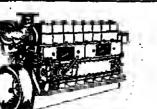


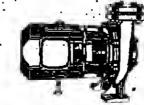


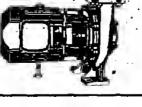


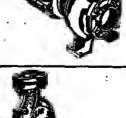


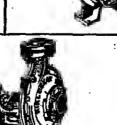


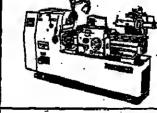




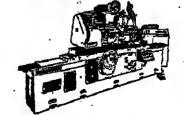












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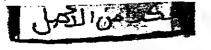
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A quango walking on troubled waters

A RIDE down Liverpool's Mr. Haseltine's ideas is not at south docks road must be all clear. one of the most depressthe people. From Pier Head, things were said about the pour hundreds of millions of within a stone's throw of the centre of the city, to Toxteth the monotonous gloom is un- Lahour-controlled

North of Pier Head, up into Bootle, things are better. The buildings still look as though little has been spent on them since Victorian times but at lorries loading and unloading and other signs of activity. And at Seaforth the busy container terminal shows what can

This whole waterfront is now the subject of an enormous row which has broken out involving Mr. Michoel Heseltine, the Secretary for the Environment, Merseyside County Council, Liverpool District Council and several other councils.

It concerns who should hove responsibility for undertaking the massive development programme that will be necessary to inject life into this once prosperous area.

Just as the county council bagan to get to grips with the run-down area—probably one of the worst examples of urhan dereliction in Britain — Mr. Heseltine has stepped in and set up a superpower, an urban development corporation to sort of new town under a different banner), to mastermind its conversion. To add to the problems, Sir Keith Joseph's industry Department has leaked the idea that part of the orea at Speke is under consideration for designation os one of the country's enterprise zones. where businessmen will he free from such irksome

constraints as the need to apply

Minister in the city. And Liver pounds—much of it government pool District Council, the money—into run-down areas.

Labour-controlled second-tier The businessmen are there authority, stirred the pot by also to try to interest private the inevitable.

making it plain it had little developers and privata money One of Sir F sympathy with the county and into projects.

not much more with Whitehall.

But it is the

least there ore ships moored. Mr. Heseltine won over bis most severe critic, Sir Kenneth these new quangos are to be Thompson, Tory leader of the successful they will need a county council. Sir Kenneth is degree of co-operation from to become deputy chairman of the local councils. If this the urban development corporation under its chairman, Mr. Leslie Young, the chairman of J. Bibby and a highly respected industrialtst in the city.

Combination

Mr. Heseltine has set up two urban development corpora-tions, ona to cover London's docklands and the other for Liverpool's. In each case be has followed the same pattern over appointments. In London he asked Mr. Nigel Broackes, chairman of Trafalgar Housethe property - shipping - newspapers group—to be its bead and Mr. Bob Mellish, ex-Labrur Minister, to be number two. In Liverpool the businessman-politician combination was repeated with Mr.

Young ond Sir Kenneth. The naed for an active politician is obvious. The work of each urban development corporation will cut very much ocross—and take powers from the local authorities in the area. In London five boroughs and the Greater London Council are affected: -in Liverpool, three for planning controls or pay districts (Liverpool, Sefton and rotes. How this squares with the Wirral) and the county.

The businessmen are there he sees it, is to co-operate with

But it is the politicians' role that its by far the more month, to everyone's surprise, important. They have to smooth Mr. Heseltine won over bis most over the local authorities. If co-operation will be difficult to obtain in London it will be doubly so in Liverpool.

Here the role of Slr Kenneth is all-important because of his implacable opposition to the establishment of an urban development corporation until the very last moment. He said some very nasty things about it. One of the more polite, as he freely admits, was that "an urban development corporation would be another quango and one to dissipata resources and cause delays."

So why did be change bis mind? To answer this one has to understand bis background.

In local politics Sir Kenneth, at the age of 70, is o very senior figure. For 14 years he represented Liverpool's Walton constituency al Westminster; for five of those years ha was a jnnior minister, first as Assistont Postmaster General, later Parliamentary Secretary at the Ministry of Education,

It is not usual to find council leaders who have spent time of Westminster, still less usual to find an ex-minister in the council chamber, One thing that houses in the south docks hat One set of docks—Albert, Sir Kenneth learned during his little bas been done to the Canning and Salthouse—almost years in central government general appearance of the area. next to Pier Head, is already

The businessman is there to was the necessity of bowing to satisfy Tory principles and to the inevitable and then The proposal for on urban overcome objections from the administering the inevitable ing experiences in Britain. The development corporation im Tory backbenches in the House for the good of the community. buildings stand gaunt, empty and derelict. It's like New York's lower east side without Council and the Minister. Harsb hut be understands that Mr. Heseltine intends to introduce one. The hest course, os

> One of Sir Kenneth's major tasks will be to placate Liver-pool District Council. The antipathy between county and district goes back to local government re-organisation in 1974. Before 1974 Liverpool was a big city; it hod a lord mayor and was sovereign within its own borders. Now it is a district, no different from its naigh-bonrs, Sefton or St Helens or the Wirral. The districts run education. housing, sociol services, libraries and parks but the county is responsible police, fire brigade, Liverpool airport, art galleries, the Mersey tunnels and, most important, industrial develop-

Resentment

Since Liverpool has no responsibility for industrial development it does not mind a super authority coming in to take these powers away from the county. The county strongly resents losing them, especially as it bas taken the lead in doing something about the derelict docklands.

The docks actually belong to the Marsey Docks and Harbour Company, successor to the Mersey Docks and Harbour Board which collapsad in the early 1970s with hig debts and had to be financially restruc-The company bas managed to attroct some small concerns into the old ware-

tionally served the Americas. and now the focus is more on Europe. With the switch to containers and the demise of the passenger trade, Liverpool suffered badly. Eight years ago the south docks closed.

Because of legal limitotions it has not been in the interests of the company to sell the docks to a developer. Any money raised on sales would bave to be pold to the bond-holders in the original Docks Board. There was little point in selling when there was always the possibility that a lease could be negotiated which

Eventually, o year ago Merseyside County Council negotiated a 150-year lease with the Mersey Docks company and the way was opened for development. Immediately, the council was approached by a number of developers, knocking on the doors of county

holi.

Faced by such o threat to our

spending money on defence or

The decline of the docks under offer to Gerald Zisman stems from changed patterns in Associotes for a trade centre. British trade. Liverpool tradi And a consortium has proposed a massive development for the Queen's Dock which will in-clude industry, housing, shopping, leisure ond community interests. The most eye-catching aspect of its proposals is the proposal for 2m sq ft of office space contained in o single tower 1,835 ft high, one of the tallest buildings in Europe. The consortium believes such o development could generate between 30,000 and

Any development that proposes jobs would obviously be looked at sympathetically in Liverpool. The city bas an unwould bring in income to the employment rate of over 12 per company. average, and no sooner does its go-ahead development ogency (an offshoot of Liverpool District Council) manage to attract more companies than a big closure is onnounced.

60,000 jobs.

more than 100 employees each time were announced, ranging from Dunlop's decision to close its tyre plant with the loss of some of the dockland in 2,291 jobs, to the 100 lost by Birkenbead ocross the Mersey James A. Whittle, a building (and in the Wirral).

firm. Others laying off workers included Pressed Sleel Fisher which has to be done quickly (part of BL), Lyons Maid, if the corporation is to open ita Plessey and Meccano.

plant at Knowsley (actually part of the city but in a different local outhority area from Liver-pool) at a cost of 550 jobs.

Despite all these setbacks unemployment rose only marginally last year. In January there were 40,138 out of work and by the end of 1979 the ottracting jobs almost as fast future development will be put as it was losing them, a notable back by a decade or more.

Now this work by the district council, and the work the county is puttling in will be held up while deliberations continue about the role and functions of the urban development corporation. And until the docks are put right Liverpoot will never regain full prosperity. Sir Kenneth says "the state of the docks is a cancer that bas spread into the city. Until that is put right, the city will not recover."

At the moment the corporation bas no name, no area, no functions. It bas just Mr. Young and Sir Kennetb Thompson. Mr. Heseltine bas told them to go away and write the corporation's prospectus. He has given the same remit to Mr. Broackes and Mr. Mellish in London.

Responsibility

area. Liverpool's south docks cover about 300 acres. Sir Kenneth believes that the corporation will have responsibility for obout 2,000. To encompass Last year 14 closures affecting such an area it must take in the whole of the north docks, some of those in Bootle (port of Sefton District Council) and

doors on January 1 next year, And now Massey Ferguson is the first crucial appointment considering closing its assembly will he that of a chief executive Sir Kenneth envisoges o smoll governing boord for the corporation, perhaps no more than nine or ten strong, including

the chief executive. That man will have hundreds of millions-much of it from tbe Government-to spend over the next ten or 20 years. If he figure had risen to 40,630. In fails money will be wasted on other words, the city bod been a large scale and Liverpool's

Viewpoint

The pessimists see the corporation taking a year or two to recruit staff, hire offices and draw up plans. By then a general election will be approaching. A Conservative Government, forced to trim spending to make way for more tax cuts, would then stall, say the critics. Plans would bog down in the Department of the Environment. The chief execu-tive would resign in frustration, Sir Kenneth would retire, and

the corporation would collapse. By 1985, they believe, no more development will have taken place than there is today and another five years will have

been wasted. If the pessimists are right it will be a great shame because Liverpool is at last beginning to First task for Mr. Young and do things. A lot of commercial development is taking place in urban public tronsport system has been started and there is a feeling of confidence in the air. If the pessimists ore wrong then the Merseyland Urban

Development Corporation, or eventually whatever nome eventually emerges, could point the way forward for areos other than Liverpool and London's dock-

Letters to the Editor

Productivity in steet

From Mr. P. Kille: Sir. — I have just beard, yet again, Mr. Scholey of British Steel Corporation declaring that the unions will receive at least a 20 per cent increase on wages if only they would occept bis plan of local productivity agree-ments: The unions have not up to now accepted this, and in my opinion will not do so, and 1

think I can see why. . From my experience and ob-servations of the steel industry at Corby and at other works. very little control of productlvity can be achieved through human agency. The speed of throughput, from ore to the sidings through to outputs from rolling mills is determined by machines and mechanical means and by the technical and physical noture of molten iron and

Increased productivity is achieved right at the beginning. by increased orders, not by the men. Getting orders is the Job of BSC management, not that of

The unions must look on productivity ogreements as a con trick. If BSC does not get orders, it will not hove o relatively fixed wages bill to pay, as such agreements will automatically reduce the wages cost, to the benefit of the company, but at the expense of men's living standards. P. Kille.

Corby, Northants.

Civil Service pensions

From Mr. L. Bryont.
Sir.—Once again, Mr. Kendall
is on the defensiva regarding that section of the community forming an increasingly privi-leged group in respect of pension expectations.

He calculates that civil ser-

vonts will themselves pay 57 per cent of the cost of civil service pensions for this year. Does be mean 57 per cent of pensions currently paid to e number significantly less than the civil servants of today, or does be mean 57 per cent of the actuorial cost of providing inflationproofed pensions for those currently employed? Mr. Kendall said that infla-

tion-proofed pensions can be had for money. Could he please give the name and business address of an actuary who is prepared to quote a figure for on inflationproofed pension to be funded, so that lbe full liability is met even if the employer concerned subsequently goes out of busi-

The reason that employees in E. C. Brown. the private sector cannot count on inflation-proofed pensions is Menston. quite simple: their employers Nr. Ilkley. cannot print money. The State can only guarantee inflationproofed pensions to civil servants and others because it can tax the rest of us in order to do so and is not obliged lo fund its commitments.

If civil service pensions con-tinue to be indexed they should be indexed in accordance with the general level of pension increases which the private sector can afford. By the same to show a growing sense of frustoken, the percentage contributations should be likewise commanufacturers, who are, to date, parable. Unless this is done and done quickly, there will very little help with their probdevelop a deep division within lems from the European Committee pation, which is undestrable. the nation which is undesirable, mission. I helieve a similar otti-

of a million civil servants are from our Government (man-units the integrattion of Europe entitled to fairness and justice; made fibre and carpet imports), would be ochieved in a short so are 25m other employees. If, as Mr. Clough suggests, time. The rationale and finance textile manufacturers should of defence would be more easily parability between the two. Civil servants duly obtained comparability in respect of earn-ings, but they are pushing their luck just too hard in respect of pension guarantecs.

L. W. Bryant. 23. Kingsfield Avenue, lpswich.

Index-linking arguments ...

From Mr. E. Brown Sir.—To end once and for all the arguments over index-linked pensions for local and central government employees including Ministers and MPs. there is one logical solution. Government introduction of legislotion to stop them completely before the next increases are due in 1980. In return, increase salories in the public sector by the amount of the claimed average contribution, minus the average con-tribution of private sector employees without future index linked pensions. Additionally, make a once and for all payment to current employees ond pensioners of the extra amount they claim they have con-tributed since the introduction of this financially incalculable perk. Equate working conditions between the private and public sectors, i.e. retirement age, holi-

days and the length of tha working week. The Government could then invite the private sector pension fund industry to calculate the cost of index-linked pensions un to 5 per cent. 10 per cent or 15 per cent inflation, based on similar schemes in the private sector. Local and central govern ment employees including MPs tn be given a choice of making additional contributions additional contributions to guorantee some indexing of their pensions but over 5 per

cent the whole cost to be funded by themselves. This will satisfy the vast majnrity of the weolth crealors of our nation who rightly or wrongly consider there is an orchestrated fiddle of pension and other statistics by senior civil servants and their union officials to justify their own ends. It will also give most tax-payers a feeling that justice has been done and that by reducing inflotion at o stroke it will belp the vast majority of private sector pensioners whn have seen their incomes diminish at on ever increasing rate duc to the

inefficiencies of successive Governments... When inflation has reduced to o manageable level of around 2 per cent to 3 per cent, the Government of the day can then look at pensions on o national basis.

17. Howksworth Dritte.

Imports of textiles

From the National Officer. Association of Scientific, Technical and Monageriol Staffs
Sir.—The warnings (March 6)
by Mr. Alan Clough, president

consider producing obroad, one must ask is it not slightly hypo-critical to sbout from the roof-

ocity to another country. What price to employment would this policy mean both for the United Kingdom, and, indeed. Europe as a whole? We would surely find ourselves in a situation where the Covernment which is From Mojor Cenerol R. Mons so fanatically committed to con-trolling the money supply, hav-

Perhaps we should put John Bull first, and the Government produce a policy for proper import management and allow the textile industry to re-equip for the future.

East Road. Longsight, Monchester.

Defence dilemma

From Mr. P. O'Brien Sir.—The logical conclusion to Britain's defence dilemma (article by Ian Davidson, March 11) is for the EEC to be taken faced by NATO is massive; com-one stage further and defence prising formidable and ever integrated with EEC finance. Ideally. the forces of each member country would be integrated into one force and foreign affairs be dealt with initially by the Council and later

by a Cabinet drawn from the European · Parliament-If conscription were introduced on the French pattern chemical or conve and our youth served in mlxed, military operations.

Toro?). one entrepreneurial big shot after another has burst upon the British business scene, marched his company to the top of the nearest hill, only to find that there's a precipice

On the way up the institutional investors rush to join-the ranks of the nobla "Duke's" army, enjoying the spoils on the way. Sometimes there is a takeover battle and, while the sound of shot and shell rends the air, the nimble men from EC2 have deserted to the other side. At other times when the going has got rongh, the army of analysts hove flogged their ammo to the nearest trooper and scurried off to join some

get shot — but then oeither do fill in the purpose of the meet-mutineers and it is a sad reflecing and would not be a proxy tion on the men of the Life (Assurance) Guards and the Infantry Unit (Trust) etc. that they have never simply refused to let their "Duke" march another step until be has appointed a couple of able staff

institutional investors who accept their responsibilities, one of which should be to take the lead in finding and appointing at least two nun-executive directors (NEDs) to its hoardroom. You command (Editorial, March 13) the U.S. practice whareby senior executives from nnn-competing companies take on this job. The trouble here is that it requires at least two days a month - and in critical

fundamental freedoms discussion of the relative merits of resolved. The effectiveness and economy of defence more likely.

tops "buy British;" and then to move your manufacturing cap-oclty to another country. What

Military

loped his argument from an almost entirely economic standpoint; omitting any mention at the ontset of the military threat posed by the Soviet Union and its surrogates against the West. Any realistic defence discussion must start with such an assessment otherwise one can be easily mislead into believing the accuracy of some politically inspired intelligence evaluations which start from the premise of bow much can we afford for defence, what will that buy in terms of men and equipment. and then a threat is manufac-

prising formidable and ever growing land, sea, air and mis-

Outsiders on the board

From Mr. J. Butcher week — to discharge the job Sir,—Lika a series of Grand Old Dukes of York (or, Plaza executive cannot do this. There must surely be many men with good experience, but more important lots of wisdom, who are willing to do work of this type for half a dozen or so noncompeting companies, as their

main activity.

meeting.

But if the NEDS are doing a

good joh, calling an egm should

not be necessary. They will

the performance of the com-

pany? (as you suggest) but

must also satisfy themselves

that the information is reliable

and that they are getting the

full picture. Not only must they

be in contact with the senior

financial side, but they will need

to review matters with the

auditors. Indeed one of their

auditors if this is in the share-

bolders' interests.

John V. C. Butcher

16 Morsham Court

But if the NEDs are doing a effective, if their only sanction is resignation. Assuming that the sharebolders trust them, it is surely sensible for them to hold blank proxies calling for an extraordinary general meeting of any time they both think this occessary. One of the reasons wby it so difficult to curb the "Dukes" is that calling an egm requires 10 per cent of shareholders to requisition it and it is not easy to obtain this. The blank proxy other general. In this game deserters don't would leave it for the NEDs to

mutineers and it is a sad refleccolonels to stop him charging into the Valley of Death.

Every company needs to have and unnecessary. Three-quarters tude is beginning to show itself times as many as-two days a welfare borders on the triviol. Talk at this critical stage in international affairs of reducing armed forces smacks of the appeasement policy of the 1930s and we need no reminder of the disastrous end of that road. Regrettably, to achieve and remain at the required level of

deterrence often demands it is for, far better that we Sir.—The weakness of Ion should be prepared to make Davidson's logic in his article such sacrifices rather than give ing to find more ready cash to oo our Defence Dilemma the enemy ony reason to suppay for more unemployed.

tMoreb 11) was that be deve-pose that we have grown so pose that we have grown so weak that overt aggression would be a worthwhile risk. All history shows that this is the sure path to war. (Moj. Cen.) R. S. N. Mans. Kirke House. Sway Road. Brockenhurst, **Dereliction** in docklands

> tured to suit this capability.
>
> The truth is that the threat sile forces. This great array is harnessed to an ideology dedicated to achieving the Soviet aim of world domination. Moreover, the doctrine that governs the employment of this power does not discount the use of any means, be they nuclear, chemical or conventional, in

The problem, in London's docklands areo, is not release of land, but provision of modern roads. The South Woodford to Barking relief road will not commence until 1982 and the East London river crossing is not programmed. The Southern relief road is a matter of considerable argument; again no

In the light of these circum stances, the release of more land would be of no benefit and we can only have a vibrant inner city area if the means of communication are provided. David W. Bloomfield, County and Suburban Properties. 23, Dorset Street, W1.

From Mr. D. Bloomfield

Sir.-I must take issue with

Mr. Staden of the Transport and Ceneral Workers' Union (March

Looking at patents

From Dr. C. Oppenheim

Sir.—A. H. Hermann's excellent survey of the problems of British patent classification (Marcb 12) includes two erroneous statements made by the Patent Office. It is not true that the original British patent classification was devised to ossist examiners assess for novelly; it was designed for the public's use - its use by examiners only occurred decades later. It is time the system returned to this original purpose —to serve the public.

It is nonsense to state that

to vote with the NEDs at that input time for computer coding is high and computerised retrieval systems are inflexible. All major information retrieval systems are now computerised need to "have access to in- and they work flexibly efficiently formation on which to judge and reasonably cheaply. That the Patent Office refuses to bring its system into the 20th century is bod enough, but to make lame excuses about "inflexibility" demonstrates how locking in knowledge about current developments it is. A flexible monagement, especially on the and cheap computerised system would probably provide better retrieval than the Patent Office's present system, and ot lower tasks may be to bring in new cost. What will it take to couvince the Patent Office that it is time it bad a re-think? The City University.

GENERAL

UK: Mr. James Calloghan,

Bromley. Union of Post Office Workers' special delegate conference on reduced working week offer.
Mr. Tony Benn, Mr. Stuart
Holland and Mr. Paul Foot are
among speakers at Labour Party mass meeting on the future of the Left, Central Hall, West-

International Brewing, Bott-ling and Allied Trades Exhibition, and the International Packaging Exhibition, open at the National Exhibition Centre,

Today's Events

Opposition leader, opens constituency Labour Party head quarters at H. G. Wells Centre.

Birmingham (until March 21).
Two-day seminar opens on European competition law, Royal

Gardeo Hotel, London, Overseas: Mr. Douglas Hurd. Foreign Minister, and Ministerial representatives from Australia, the U.S. and other countries, meet in Genevo to plan alternative Olympic Games, EEC Finance Ministers meet in

Brussals, PARLIAMENTARY BUSINESS House of Commons: Debota on Olympic Games. Honse of Lords: Competition Bill and National Heritage Bill,

Terrorism Order, British Aerospoce Bill, committee (first day). Debate on road planning processes.

OFFICIAL STATISTICS Balance of payments current occount and overseas trade figures for February published by Department of Trade. COMPANY MEETINGS

See Financial Dlary on page COMPANY RESULTS Final dividends: Beatson, Clork, BTR, James Fisher and Sons. lavergordon Distillers (Holdings). Pittard Group, Relyon PBWS. Interim dividends: Barratt Developments. R. Green

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THE M&G GROUP

Lund profit setback

A further sharp fall in the second balf after the mid-term decine left taxable profits of Noble and Lund well down at £67,689 for 1979, against £172,371

from 0.847p to 0.42p, with a chain, reduced final of 0.245p (0.6125p). "Ex

They add that profit margina of this engineer and machine tool maker bave been eroded in the face of the road haulage, engineering and steel strikes. The present high level of interest rates to the UK and exchange rates are reducing the demand for high value machines.

Turnover for 1979 was little changed at £2.24m, against the Centre chain might fetch some £45m.

23.21 (£78,537 charge), the net balance emerged down from further 30 on the Continent. £93.834 to £68.010.

Earnings per 10p sbare are given as 1.19p, compared with

BETT BROTHERS LIMITED

The THIRTY-THIRD Annual General Meeting of Bett Brothers Limited held the Augus Hotel, Dundee on Friday, 14th March 1980.

The following are extracts from the circulated Statement of the Chairman, Mr. Albert A. Bett.

Accounts

I have pleasure in submitting any Report to the Shareholders on the Accounts of the Company for the year ended 31st August, 1979, after meating all charges, incloding depreciation, but before providing for axision, amounted to £2307,311 as compared with £2.035,564 in the previous year. After providing for execution, the profit amounted to £115,349 as compared with £944,744 in the previous year. An Interim Ordinary Dividend of £0000 per share has been paid and the Directors now recommend a Final Dividend of £5000 per share payableon, 17th March, 1980, making a total distribution for the year of £5000 per share, compared with £9003p for the previous year. Certain shareholders waived the interim dividend aggregating £24,025 net and have also waived the proposed final dividend aggregating £00,465 net, thereby reducing the cost of dividends to the Company from £375,000 to £390,510, a saving of £84,490 (1978-£75,744).

Trading Activides

Trading Activities
Whilst your Company, in common with the building industry as a whole, continues to trade under adverse economic conditions, I am pleased to report that, on a virtually state turnover, profit margins have improved.

Your Board continued its policy of being selective to tendering for new contracts and contracts were obtained libboth the public and private sections.

Efforts were concentrated on complexing outstanding longer term contracts and a substantial volume of work was carried out for the Group's

own Property Company,
The Private Housing Division of the Company was again most active,
increasing its contribution to both turnover and profits.

Whise the volume of work on other to the building industry continues to decline, there are signs that margins are easing and already, in the current year, several worths hile contracts have been obtained, although we will do well to maintain our level of turnover in the compenitive tender sector. The effects of the high mortgage interest revently announced and the shortage of mortgage funds on the private housing sector have verto befully assessed, but I am of the opinion that, with an aggressive suitude to sales, we shall maintain our share of this market in Sootland and we are accordingly servicing a lawy number of its to white the best ends and to the automate.

ervicing a larger number of sites to achieve these ends and to take advantage of the increase in demand which should follow any reduction in the current

les outwith the tiroup as a pt ion in take. The production constraints being researched and new rather applied for the or manager of contain.

The large are changed to see a manager of containing the developments which, any production of the containing the developments which, the production of the containing the containi

th interest levels.
Our manufacturing and contracting sub-idiaties have all increased their

Bass denies plan to buy **Centre Hotels from Coral**

of Centre Hotels. However, Mr. NW5.

Mr. Lloyd added. It has not yet received sufficient details to assess whether it would be The net total dividend is cut interested in all or part of the

The directors say this takes we will look at any offer or account of the possibility of a group," said Mr. Richard Beer, further deterioration in the near future.

Bass Hotel managing director.
But, although the group is interested in expanding its botel side, any prospective Coral pur-chase is "only rumours so far," he added.

Corat's Centre Hotels com-prise 21 hotels and two mna in the UK, Britain's fourth largest hotel chain. It also has four hotels in Amsterdam. Outside estimatea suggest that

LAGANVALE Laganvale has agreed to pur-chase the freehold properties

BREWERY GROUP Bass said 230a, 242-248 (even numbers) yesterday that it bad shown Kentist Town Road and 14-19 interest in Coral Leisure's chain (consecutively) Wolsey Mews honuses.

James R. Lloyd, vice-chairman of Bass, stated that it had no specific plans at present to acquire the chain.

Bass became aware that the hotels might be for sale, and requested further information, Mr. Lloyd added It has not vertically approached the sale of the sale of

Life Assoc. of Scotland lifts bonus

Substantial increases in reversionary bonus rates have been made for 1979 by the Life Association of Scotland, a member of the Nationale Nederlanden Group, a major

on the simple bonus series, tell to 4.09p (7.41p) and again which is now closed to new business, the bonus rate remains there was an extraordinary debit unchanged at £5 per cent of the of £80,134.

sum assured. But capital and retirement boous rates have bee increased from 20 per cent to 25 per ceot of attaching

Mr. Jim Souness, the general manager of LAS, stated that by increasing the terminal boous, the policyholders were given a more favourable benefit.

Mr. Souness elso pointed out that the higher compound rever-sionary bonus rates reflected the investment performance of the company which had resulted in a higher average yield and increased realised capital profits.

Authority Investments

n Dutch insurance conglomerate.

To all with-profit assurancea and annutries, the rate is from £371,550 to £3.585 for the improved by 25p to £4.75 per year ending September 30, 1979. a staching bonuses.

On the size of major vestments of £3.330 compared with £46.178, taxable profits of with £46.178, taxable profits of with £471,550 to £3.05,565 for the improved by 25p to £4.75 per year ending September 30, 1979. a Tax for the period to the period

ron ore in the invectory acquired

COMPANY METTINES—
Great Northern Invest. Str., 90, Mitchell
Str. Glasgow, 12.09
Thropmorton Tat., 25, Milk St., EC. 12.30
BDARD MESTINGS—
Thals:

omben sirclough Construction overcast Celeery L'Amie mith and Naphew

Square, W. 12.00
McKlimon of Scotland, Kirichiswa Rd.,
Costoridge, Lancashire, 11.00
rati (F) Engineering, Grosvenor House,
Park Lane, W. 12.00
Inion Discounc of London, 39, Cominil.
EC. 12.00
BDARO MEETINGS—
Inside

Saro Consolidated Industries British Aluminium

Finals:
Source Consolidated Industries
Syrish Aleminium
Dickinson Robinson
Dickinson Robinson
Nali Engineering
House of Lerose
Jacobs (John Linchester Assurance
Mackey, Hughi
Manor National
Metal Closures
Modins
Tiffing (Thomas)
Tube Investments
Vescer
Welr Grood
Interims:
Armstrong Equipment
Belam
Medminster
Trailord Park Estates
Walker (James) Golgsmith and Shrensonth
OlVICEND & INTEREST PAYMENTS—
Beales (John Lin Short
Larmschins & London Invest. Tst. 2.20
Newmark (Louin 3.50
Ramsonnes Sims & Jafferies Shoepe,
1,925pc
Jam Commercial Corman Otto Fils. Rate

Ramonica Sims & Jefferles Shoope, 1,5250c 1,52

11.00 Commercial Invests, 117. Old aroad St. EC. 2.50
East Annillah Water, 183, High St. Lowestoft 3.00
Greenirlar Invest, 11, Austlo Friers, EC. 2.55

Pengkalen, 65, Loadon Wall, EC. 238 Scottish Agricultural Industries, North British Hotel, Princes St., Edinburgh, 12.00

THE BANK OF YOKOHAMA LTD.

Negotiable Floating Rate U.S. Dellar Cerlificates of Deposit maturing.

In accordance with the provisions of the Cerlificates of Deposit, notice is hereby shown that for the interest swinds from 15 March 1930 to 15 September 1950 the Cerbitaries will Carry an interest Rate of 15 1% per annum.

Acent

17 March 1250. - First Chicago Ltd.

Whatlings Gt. Eastern
St. EC. 12.00
POAPO MESTINGS

"AND MESTINGS—
Finals:
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'es Service
Liverpool Dully Post and Edao
Phillips' Lambs
Sharps and Plahor
'Staction'

and Philip. Anges Hotel. Market-Bandes, 12.00 ngs. Gt. Eastern Hotel. Liverpool

WEEK'S FINANCIAL DIARY

MINING NEWS

Leichardt threatened with suspension in Adelaide

The Adelside Stock Exchange is lagging behind. Nickel sales has threatened to suspend will be less than expected for trading in the shares of Leichardt 1980 and unit costs may be Exploration unless the company higher than forecast. African diamond prospects by and the end of December 1979. this morning, reports James Seltrust had net earnings of Forth from Sydney. A\$1.06m (£521,080). This profit Forth from Sydney. came from revenue earned not only from Agnew, but from 5 per cent of the Mount Newman iron ore venture in Western Anstralia In London Leichardt shares

have fluctuated sharply. Leichardt announced earlier last week that it had acquired Mopani, a South African com-pany which bolds 25 per cent of a diamond joint exploration venture with African Selection

Trust, a subsidiary of Selection Trust of London. It gave details of diamonds discovered by Mopani's hulk sampling and attached comments from a consulting geologist which referred to the "ultimate payability" of the deposit.

The Adelaide Exchange wants details about the vendors of The following is a record of the principal business and financial engagements during the week. The Board meetings are mainly for the purpose of considering dividends and official indications are not always available whether dividends concerned are interims or finals. The sub-divisions shown below are hased mainly on last year's timetable. Mopani and the price Leichardt paid for the company, Leichardt has requested an extension of time to provide the information, but the Exchange has said details are needed to maintain a fully informed market.

Agnew may upset result from Seltrust

Intergordon Usavina Montage Boston Inv. Tyl.
Pitiard Revon PBWS Section Inv. Tyl.
Pitiard Revon PBWS Section Inv. Tyl.
Revon PBWS Section Inv. Tyl.
Barratt Developments Thor
Green IR.I Properated Southert and Piti.
DIVIDENO & INTEREST PAYMENTS—
Built Southert and Piti.
DIVIDENO & INTEREST PAYMENTS—
Built Gr.
M. Univ. Bett Brown 1.519
Bett Brown 1.59
Bett Brown 1.50
Brunner Inv. Tst. Ord. Units 2.759
Colmore Invests 19
Ellis & Everand 2.59
Helenc of London 0.570
Better of London 0.570
Helenc of London 0.570
Irassury 1.2pc 1.983 Spc
Trassury 1.2pc 1.983 Spc
Trassury 1.2pc 1.983 Spc
Trassury 1.2pc 1.983 Spc
Trassury 1.2pc 1.572
Helenc of London 1. Seltrust Holdings, the Selection Trust unit in Australia established last year, may not meet the estimate of A\$14m (£6.86m) for 1930 earnings. This is made clear in a statement accompany. ing the first figures for the new

group.

The company noted that the production build-up at the 60 per cent owned Agnew nickel mine had been slower than anticipated. Mine tonnage has picked up in recent weeks but. Seltrust said, throughput in the concentrator

1979

1978

Leigh Interests has purchased, for a nominal £15, an option to acquire on April 30 eight Safe-way companies, of which Mr. Frank Taylor is the principal shareholder. The main company, Safeway Sludge Disposal, owns and operates a high technology waste treatment plant at
Garretts Greeo, Birmingham,
which is complementary to
Leigh's polymeric sealosafe and the drillsbip, Regional plants on the Empire site,
Endeavour.

IMI enters U.S. drinks dispensing joint venture

BOARD MEETINGS

Interime Barratt Covelopments, Green Properties, Stothart and Pitt.

gue Ogston Inve Relyon P.B.W.S.

Finals—BTR. Boatson Clark, James Fisher, Invergordon Distillers, Menta-gue Bogton Investment Trust, Pitterd,

FUTURE DATES

Herst (Charles)

London and Manchester Assce.

tangible assets (subject to adjustments) of the Safeway companies as at April 30 and there is a deferred cash con-

sideration expected to be pay-able in 1982, which would be

calculated by reference to, but not exceeding half of the audited combined profits before lax of the Safeway companies in

the two years ending April 30,

The combined net assets of the Safeway companies for the year to April 30, 1979, were approximately £164,000, and the combined profits before tax were about £65,000.

Electrolux (Section: Electri

Emess Lighting (Electricals), Medtronic (World Markets—

New York), Invest (World Markets-

FT Share

BOARD MEETINGS

DIVIDEND & INTEREST PAYMEN

A CITY Properties

OF THE PROPERTIES

ASSOC (Imly, 51-90; Red, Fr. 8-18-55); Pr. 8-18-55; Creaming and Free Pr. 8-18-55; Creaming

Please Carlton industries Carlton and Dandy Hewitz (J.) Williams and James (Engineers)

Information

An Anglo-American joiot venture company in the drinks dispensing field has been estab-lished, following oegotiations between British metals group IMI, and the Cornelius Company of Minnesota, U.S.

The following companies have notified dates of Seard meetings to the Stack Exchange. Such meetings are usually held for the purpose of considering dividends. Official indications are not available as to whether dividends are interims or finals and the sub-divisions shown below are based mainly on less year's amorable. The two companies announced their intention in December of forming the new group, to be called IMI Coroclius.

Agreements have now been finalised, and the group begins trading with a turnover of some 220m annually. It comprises all European subsidiaries of Cornelius, which is prominent in drink dispensing technology, together with IMI subsidiaries Redditch Controls, and IMI Paxman. IMI will also make a cash payment to Cornelius of

The group plans to operate in all European couotries, in both beer and soft drinks. It is owned 50-50 by the two companies. Its chairman and chief executive is Mr. Roy Amos, with Mr. Bob Speccer as deputy chairman. Both men come from the IMI

Leigh Ints. set for acquisition

The option will allow Leigh But the figures are not a guide to cootinue investigations to to a full year's earnings, Seltrust said. This is because of the sales procedure adopted for nickel and The consideration for the purchase would be in two parts. In or about July a cash sum would last August.
Seltrust "A" shares were 10p he payable of an amount equal lower at 155p on Friday.

or about July a cash sum would he payable of an amount equal to the audited combined net

| Coutts & Co. =

Mr. David Macdonald has been Peter R. Dudson, denuty appointed a director of COUTTS managing director and Mr. AND CO. He is a deputy Michael C D Combin, director. chairman of Hill Samuel and Co. and a former director general of the Takeover Panel. Mr. Alastair Davidson resigns from the Board of Courts and Co. on March 31.

Sir Maurice A. E. Hodgson, chairman of Imperial Chemical industries, and Shelkh Ahmed Juffali, managing director of E. A. Juffali and Brothers of Saudi Arabia have been appointed to the international advisory committee of the CHASE MANHATTAN BANK. The committee, formed by Chase in the mid-1960s advises the bank on matters affecting international operations, particularly economic issues. Its members are industrialists and economists from 16 countries. The committee ia headed by former U.S. Secretary of State Dr. Henry A. Kissinger. Mr. Oswald von Goertz has become managing director of CHASE MANHATTAN BANK LUXEMBOURG S.A., succeeding

Mr. Arno Schleich, who is to join Fiduciaire Generale de Luxembourg Mr. S. H. Wright (a director of Lazard Brothers and Co.) has

Mr. G. T. Without has resigned as financial director of BESTO-BELL HOME PRODUCTS on

WHEELS.

Mr. R. A. M. Barver has been appointed charman of ADDIS and Mr. E. R. Michelsen has become managing director. Mr. Robert Addis has retinquished his position as chairman but remains on the Board as

Mr. Laurence Warburton has been appointed marketing director of TRIDENT LIFE ASSURANCE COMPANY and takes over the responsibilities of Mr. Charles Wodehouse, who is moving to Abbey Life.

Mr. Peter Collard has been appointed manufacturing director of HOLT LLOYD LIMITED, the UK operating subsidiary of Holt Lloyd International.

Mr. D. E. Chatfield has been appointed managing director of FRANK PARKER AND CO., a subsidiary of Thos. W. Ward.

been appointed a director of WOLSTENHOLME RINK.

* Mr. Douglas McLeed bas joined the Board of BARRATT CONSTRUCTION as STRUCTION as technical director, succeeding Mr. Norman Bruce, who has been appointed to the new post of commercial director.

LOCAL AUTHORITY BOND TABLE

Authority	Annual interest gross		t sum Minimum	Life boud of
parentheses)	%		£	Year
nowaley (051 548 6555)		4-year	1,000	1
edhridge (01-478 3020)	14	i-vear	200	2-3
edbridge (01-478 3020)	144	½-year	200	5-6

Public Works Loan Board rates

Effective from March 8 Over 5, up to 10.... Over 10, up to 15.... 157

Non-quota loans B are 1 per ceot higher in each case than nonquota loans A. † Equal instalments of principal. ‡ Repayment hy half-yearly annuity (fixed equal balf-yearly payments to include principal and interest). § With balf-yearly payments of interest only.

14

FOR YOUR OFFICE 1979-80 IN THE CITY OF LONDON 200 Sanco Bilbeo 204 Banco Centra Banco Cantral ... 204 Banco Central 199 Banco Exterior 200 Banco Hispano 130 Banco Ind. Cat... 155 Banco Ind. Cat... 157 Banco Unquijo.... 157 Banco Unquijo.... 158 Banco Zaragoza 100 Dregados 158 Espanola Zinc 159 Fecsa 23.5 Gel. Preciados 152.76 Hidrola Mall, telephone and Telex mes-sages and orders taken and forwarded Telex received free, Co. Registration and Tax advice. MESSAGE MINDERS INTERNATIONAL LTD NEW BROAD ST., ECZ Telephone: 01-628 0898 Telex: 8811725

Murray Western Investment Trust Limited

to the longer policies and longer

PERTA BETT Chairman

2000年1978年

Annual Report for the year ended 31 December, 1979

Equity shareholders' interest Asset value per share Revenue available for ordinary shareholders Earnings per ordinary share	£61,194,046 77.1p £1,671,775 2.17p	£66,939,833 : 84.4p £1,377,781 1.80p
Ordinary dividends per share Capitalisation issue in B ordinary shares "Adjusted for capitalisation of one for two in April 1979.	2.10p 2.72599%	1.70p 1.37019%

Geographic	al distribution	of investme	ents at 31 Dece	m ber , 1979.	
	1979	1978		1979	1978
UK	35.5%	32.8%	Asia	3.1%	3.5%
USA	33.3%	31.6%	Brazil	1.4%	1.9%
Japan	7.7%	14.5%	Others	2.8%	2.2%
Europe	4.6%	4.1%		88.4%	90.6%
			Bonds	11.6%	9.4%
			<u>.</u> ~ ~ ~ ~ ~ ~	100.0%	100.0%

Future outlook and policy

At present sterling continues to be strong. In the longer term, however, as the UK rate of inflation continues to be higher than in the US and Japan and productivity of UK industry compares unfavourably, it seems likely that this will be reflected in an adjustment in relative currency values. We therefore do not propose any reduction in the overseas content of the portfolio.

Copies of the report may be obtained from the Secretary, Murray Western Investment Trust Limited, 163 Hope Street, Glasgow G2 2UH. An investment Trust managed by Murray Johnstone Limited.





biseley Hughes
DIVIDEND & INTEREST PAYMENTS—
and Group 1.21288p

FRIDAY MARCH 21 NY MEETINGS— Watervorks, Agus House, 45, n Stroot, Chester, 4,80

Tst., 117, Did Broad

Major The Earl of Ancaster

British Limbless Ex-Service

WE, THE LIMBLESS LOOK TO YOU

Men's Association need money desperately. And, we promise you, not a penny of it will

Oart SOUS
Greenfiles Invest, 20
Helical Bar, 10
Hillords 7,25p
McKay Securities 1,35p
McGray Intelligent Notes
See 1988 91567.82
Westra Group 1.5p
SATURGAY MARCH 22
DIVIOLATION MARCH 22
DIVIOLATION MARCH 22
Glassow Stockholders 15t. Ord. Units 2.2p
Og. Spept, 1,75pc
Og. Spept, 1,75pc
SINDAY, MARCH 23
OIVIDEND & INTEREST PAYMENT—
Serck Ob, 5-spc

We come from both world wars. We come from Both work wars.
We come from Kenya, Malaya,
Aden, Cyprus... and from Uister.
From keeping the peace no less
than from war we limbless look to

you for help.
And you can help, by helping our Association. BLESMA (the British Limbless Ex-Service Men's Associations looks after the It helps, with advice and encouragement, to overcome the shock of losing arms, or legs or an snock of losing arms, or legs or an example of the right stand in the way of the right enlitlement to pension. And, for severely handicapped and the elderly, it provides Residential Homes where they can live in peace and dignity.
Help BLESMA, please. We

M. J. H. Nightingale & Co. Limited 27/28 Lovat Lane London EC3R 8EB 6000's Company Airaprung Armitaga and Rhodes Sardon Hill County Cars 10.7% Pf. Raborah Ord. Frank Horsell Fredarick Parker George Stair Jackson Group James Surrough Robert Jankins Torday Torday Twinlock Ord. Twinlock 12% ULS ... Unitotk Holdings f Accounts prepared under provisions of SSAP 15.

FINANCE FOR INDUSTRY TERM DEPOSITS Deposits of £1,000-£50,000 accepted for fixed terms of 3-19 years. Interest paid gross. balf-yearly. Rate for deposits received not later than 28.3.80.

Terms (years) 3 Interest % 141 141 141 141 141 141 141 141 Deposits to and further information from The Chief Cashier. Finance for Industry Limited. 91 Waterloo Road, London SE1 SXP (01-928 7822, Ext. 367). Cheques payable to "Bank of England, a/c FFI." FFI is the bolding company for 1CFC

Finance for Industry International B.V.

£20,000,000

142 per cent. Guaranteed Sterling/U.S. dollar payable Bonds 1988

unconditionally and irrevocably guaranteed by

Finance for Industry Limited
(Incorporated in England under the Companies Acts 1948 to 1967)

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Lloyds Bank International Limited

Samuel Montagu & Co. Limited

S. G. Warburg & Co. Ltd.

County Bank Limited

The Royal Bank of Scofland Limited

Westdeutsche Landesbank Girasantrale

Salomon Brothers International

Merrill Lynch International & Co.

Barclays International Grom

B] International Limited

Nomura Europe N.V.

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	Financial Times Mon	nday March 17 1980	WODID CT	OCK MAD	KETC	هكذامنالكم	13
	Companies and Markets NEW YORK	1070 50	WORLD ST			HOLIAND	JAPAN
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CURI	RENT	INTE	TANS	IONAL	BON	D ISSUES	
Borrowers .	Amount n.	Maturity	Av. life years	Coupon %	Price	Lead manager	Offer yield %
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D-MARKS City of Oslo	80	1990	61_	8}	991	Deutsche Bank	8,789
FRENCH FRANCS	150	1986	6	141	99	Credit Lyonnais	14511
SWISS FRANCS 1**SNippon Meat Packers 1**SPrima Meat Packers	30 30	1985 1985	=	6 <u>1</u>	100 100	Credit Suisse UBS	6.375 6.500
‡**IBM World Trade Corp. ‡EIB	100 80	1986 1990	Ξ	6	100 98 1	SBC Soditic	6,000 6,206

INTERNATIONAL BONDS

BY FRANCIS GHILES

Challenge to hard currencies

President Carter on Friday was

early to forecast how dollar bonds would move but agreed that the hard currency sectors of the market were likely to he

Where dollars were concerned, bankers said that the attraction for investors of shortterm dollar deposits could prove irresistible. Not only is the return very high, especially if U.S. interest rates climb further as is widely forecast, but the currency itself stands to gain a lot from these measures. Whether such strength is translated into any movement on the dollar bond front is neverthe-

less open to question.
Logically short-dated straight dollar bonds prices should fall, but such a forecast ignores two points. First, few such bonds are beld by U.S. institutions, the ones which might be squeezed for cash and bave to sell. Second, it is extremely difficult to find such paper, even at the current depressed prices. Thus, shorter dated bond

prices might well be marked down by dealers to bring follow that there will be much

end is more difficult to predict. sident Carter's latest set of anti- professional

During the next few days weekly telex to investors put International Bond Service are what bappens in the money it: "The bond markets bave not being published this week.

houses in Europe as to the deposit (CDs) may well provide effect of the latest set of anti- a more reliable guide as to the inflation measures announced by thinking of investors and banks. The heaviest impact of the Carter package is expected to Bankers said that it was too fall on the harder currency sectors of the Eurobond market. That view is shared by bankers in Zurich, Frankfurt and

London. by at least two points last week. barkers said that the crucial factor is how far Eurodollar deposits rates rise as a result of the Carter package. This sector weeks under the widening between dollars and Swiss francs and that differential looks set to widen further.

In the Deutsche Mark foreign bond sector there was more stability last week than for some time and towards the end of the week some dealers pointed to buying from abroad which affected good quality bonds

German bankers remain reversed to read 'ever a borreal trading of such bonds.

What happens at the longer Deutsche Marks'." The Eurobond markets spent

Most bond managers and dealers last week anxiously waiting for said that institutional clients the Carter measures. A mild would require at least until the rally in straight dollar bonds short covering scramhle. As Kidder Peabody's

This announcement appears as a matter of record only.

Nederlandse Credietbank (Overseas) nv

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Nederlandse Credietbank nv. Amsterdam, The Netherlands.

Nederlandse Credietbank nv

F. van Lanschot Bankiers NV

Kredietbank International Group

Chase Manhattan Limited

Nederlandsche Middenstandsbank NV

(Centrale Rabobank)

March 17, 1980

due 1985

in short-term interest rates. Today, riskless returns of 184 per cent are available in the deposit market. Bond yields of 141-15 per cent make poor comparison when you bave to live with daily gyrations of four and five points which rarely seem to be in one's favour."

Primary activity this side of In the Swiss franc foreign the Atlantic was reduced to a bond market, where prices fell trickle and by the end of the week the \$200m FRN for ENEL was the only new dollar bond issue oo offer. The \$50m sevenyear FRN for C. Itoh was quoted at a discount of 11 points before its pricing was fixed at par. It offers the higher ever coupon on

a new FRN note, 1914.
The Yankee bond for Canada's Export Development Corporation finally appeared after being increased in size by \$50m from the initial \$200m Salomon Brothers priced the issue, which carries a record coupon of 14 per cent, at par,

In the secondary market, bond prices steadied after the whose yield had come close to heavy falls recorded during the past few weeks. Foreign holders of D-Mark paper were nevertheless deeply pessimistic still selling but some buying about the future and some was in evidence, particularly echoed the conclusion of the in issues where yields of close weekly telex of Ross and Part- to 10 per cent were available, ners (Securities): "The old The major Swiss banks are down by dealers to bring the yield offered on such paper automatic rule of never e continuing their informally more into line with U.S. money borrower but a lender of agreed stop on new issue market rates but it does not Deutsche Marks' must now be activity of public bonds. The postponement last week of two issues by smaller Swiss bank syndicates shows that other banks are falling in line. The public issue for the EIB, which is led by Soditic was cut back by SwFr 10m to SwFr 80m, middle of the week to assess at the beginning of the week. To provide space for the full the likely consequences of Prequickly developed into a text of the Federal Reserve Board's statement, prices and other details given in the FT International Bond Service are

U.S. BONDS

Trading thin and volatile

By Our New York Staff

THE MARKET spent most of the week preparing itself for President Carter's economic package. Trading was thin and rather volatile, but it ended on an upbeat, which suggests that the details of the package were spaced out, starting only half an hour before trading closed on Friday afternoon, and with the bulk of the news of changes in credit policy following a couple of bours later. So the market has not yet had a chance to react fully.

Interest rates generally declined during the week. Short rates shed about half a point, with similar falls coming at the intermediate and long end. Although Fed funds were off slightly, that market was particularly hard to gauge, because the Fed supplied considerable amounts to meet seasonal needs. The desired trading range seemed to be 16 per cent to 17 per cent. Treasury bills set new record yields at last Monday's auction, but strengthened later in the week.

Apart from a string of leaks about the contents of Mr. Carter's package, the market bad to contend with a number of developments. The prime rate climbed. 1 per cent to 184 per cent, much as expected, and production figures pointed to a fair pace of underlying economic

The money supply figures were mixed (MiA was down \$200m and MiB up \$200m). However MiB's annual growth rate of 8.6 per cent is still above the Fed's 46; per cent target. The Fed's report also showed that bank borrowing from the discount window soared by nearly \$1bn to a daily average of \$3.3bn in the week ending March 12. This would partially explain the 3 per cent selective discount rate increase contained in Mr. Carter's week-end pack-

U.S. INTEREST RATES Week Week to to Mer. 14 Mer. 74 Mer. 15.20 15.78 16.23 16.25 16.20 16.87 12.18 12.57

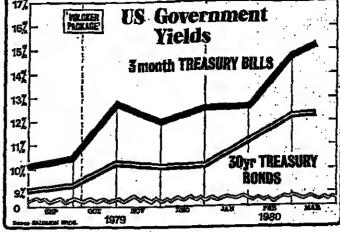
WALL STREET REACTION

Higher short-term rates in prospect

experts who were willing to comment over the weekend on President Carter's package said that the measures would push up sbort-term interest rates quite sharply. A 20 per cent prime rate (compared with last week's 18; per cent) is considered a virtual certainty before long. The more stringent reserve requirements will force banks to scramble for funds. and this is bound to drive up there was some hope that the rates on key sources like certifi-measures would work. However, cates of deposit. cates of deposit.

On the other band, the measures could produce more stability in the deeply depressed bond market - quite bow much depends on how Wall Street reacts in the next few days.

Most experts were, however, still treating the package warily over the weekend, reluctant to it opens today. Dr. Henry America, described the package Kaufman, the economist at as "basically hopeful" Salomon Brothers, who ranks among the most influential figures in the credit markets. said that the measures clearly put the hurden on the monetary authorities and brought the peak in interest rates closer. have to give the package a Mr. Carter had failed, probably But his considered verdict will strong "follow through" if it is for political reasons, to tackle



not come until this afternoon, when he puts out a special issue of his weekly presietter, Com-

ments on Credit.
Mr. Walter Hoadley, the a realistic economic message to the country. But he stressed that there are still so many uncertainties around that the Administration and the Fed will

Mr. Hoadley welcomed the new credit measures, but commented that the real area where credit controls should be applied was to the Government's budget, and be was disappointed that there had not been any real effort to cut back government spending.

This view was shared by Mr. Erich Heinemann, money mar-kets economist at Morgan Stanley, who complained that Mr. Carter had failed, probably

the problem of transfer payments' like social security and pensions, which presents pensions, which account for much of the increase in government spending. He also deplored the oil import fee because it raised government revenues and spared if the need to cut back. "They have not tightened their own belt."

Mr. Heinemann predicted that measures like the oil fee would force the Fed to accommodate the credit markets still further as prices continue to rise. He also believed that this would not be Mr. Carter's last anti-inflation package. Another would be necessary in the summer, he said, probably complete with wage and price controls.

Mr. Jeffrey Nichols, Economist at Argus, the Wall Street research firm, saw the package producing a sharp upturn or "spike" in short-term interest rates. But he commented that the lasting effect would depend on how much credibility Wall Street attached to the deter-mination of the Administration and the Fed to fight inflation.

The past record was not very good, he said. There were also doubts as to whether Congress would accept the proposed budget cuts.

MONEY MARKET FUNDS

BY STEWART FLEMING

Surging assets worry the Fed

FEARS ABOUT the remarkable rate of interest that can be paid to climb further. growth of a relatively new form of financial intermediary, the Money Market Mutual Fund, has began to be set up in the early led the Federal Reserve Board 1970s but they grew only slowly. been flooding in to the funds. to introduce measures simed at Even a year ago, their By the end of February, their curbing this growth as part of assets totalled \$10bn. They assets had grow to \$60bn, and

are a creature of the 1970s, born out of high interest rates and inflation and the inability of small investors with less than a lump sum of \$10,000 to get the benefit of these high fixed ioterest returns in saving deposits at their commercial banks, and savings institutions. in some cases, has increased Government regulations limit dramatically to around 13 and to 5‡ per cent the maximum 14 per cent and seem destined

on regular pass book savings. Money Market Mutual Funds its credit restraint programme. invest in money market instru-Mooey Market Mutual Funds ments such as bank certificates

> market have soared in the past year, the rates of return which the funds have been able to offer investors, with as little as \$500

> on their own do not have access

high returns and money has passed the total assets of the old established Mutual Funds which of deposits which small savers invest in ordinary shares.

More important, much of the money appears to have been As interest rates in the money draining out of bank accounts at narket have soured in the past smaller banks and savings

Thus, the Federal Reserve institutions.

Investors have been unable to cent non-interest bearing special resist the attractions of these deposit on increases in the high returns and money has assets of Money Market Minual Funds after March 14. This will tend to reduce the rate of return which investors will obtain, making the Money Market Funds less attractive. They retain competitive advantages such as the ability of the investor to withdraw his money quickly and what will still be high rates of return so it reinstitutions, increasing their mains to be seen whether the financing problems and raising Fed's move will stem their fears that the flow of small sav. ings from them will become a pressures which are being created on other financial

Text of Federal Reserve statement

leserve discount window.

The President has also provided he Esders! Reserve, under the termo if the Credit Control Act of 1968, with

to exercise particular restrein authory to exercise particular restreint on the growth of certain types of consumer credit extended by bonks and others. Their restrains will be achieved through the imposition of o requirement for special deposits equivelent to 15 per cent of any expension of credit provided by credit cards, other forms of unsecured revolving credit. forms of unsecured revolving gredit,

"One consequence of strong demands for money and cradit generated in part by inflationary forces end expectations has been to bring heavy pressure on credir end financial markete generally, with varying impacts on particular sectors of the economy. At the same die, restreint on growth in money and credit must be a fundamental part of the process of restoring stability. That restraint io, and will continue to be, based primerly on continue to be, cased primetry on control of bank reserves and other traditional instruments of menstery policy. However, the Federal Reserve 20076 slso baffeves the offictiveness and speed with which appreciate restmint

THE FOLLOWING is the text of the Federal Reserve Board's statement issued on Friday night:

The Fadare Reserve Board today announced grewth ranges for money announced a series of monetary and credit actions as part of a general party 19. Although grawth ranges for money and credit actions as part of a general second series of monetary 19. Although grawth ranges for money infistionary pressures. The actions of the country, growth in bank learns 1—A voluntary Special Credit Restraint Program that will apply to oil domestic commorcies banks, and invostments). Banks whose past holding companies, business credit axtended by finance companies, end invostments). Banks whose past loans whare the home or for home improves the U.S. residents by the U.S. sepencies and bronches of loreign banks. The persons on the country growth to the lower portion or even affilierus of these loreign banks are urged to co-operate in similarly restricting this! lending to U.S. companies. Special effort will be meds to select the commercial paper and the comme

CONSUMER CREDIT RESTRAINT
The special deposit requirements of
15 per cent on increases in some types

March 14 or a figure for the nearest svailable date.

Therefor, these creditors must file a monthly report on the amount of covered consumer credit outstanding during the month, based on the doily svengs amount of covered credit if that data is evailable, or the smouth.

member banks.
For non-members, the base is the two-week period that ended March 12 or \$100m, whichever is greator. The

may i. A fund that maleters ee an investment company with the Secuntice and Exchange Commission after March 14 must file a base report within two weeks ofter it bagins operations, hiscount RATE in fixing the surphame in baling the surphame

The surcharge above the basic dis-count rate would generally be related to market interest tates. It is designed to discounge frequent use of the dis-count window and to onecurage banks

count window and to onecurage banks with secess is seably markets to or ediest their loans and investments more promptly to chonging merket conditions. This should facilitate the ability of the Foderal Reserve to attain longer run bank credit and money supply objectives.

The surchatgo-will apply to banks with more than \$500m in deposits on their borrowings tor ordinary education occurs successively in two startment weeks or more, or when the borrowing occurs in more than four weeks in a calendar quarter. There will be no

respect the substance end spi guidelines in their loans borrswers or loans otherwise to support U.S. activity.

CONSULTATIVE ARRANGEMENTS Bank or thence company lending occorring at a page that appears to significantly in excess of the nation.

Dual aim

oil imports

By David Lascelles in New York

\$4.62 per barrel oil import

fee is an attempt to fight fire with fire. The immediate inflationary impact, he concedes, will be considerable.

It will push petrol prices up

by 10 cents a gallon (about 8 per cent), adding 1 per cent to the rate of inflation

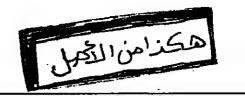
for the rest of this year. But after that, he hopes, the fee

will start to hold down con-

PRESIDENT JIMMY CARTER'S

behind

fee on



Carter's cost-cutting plans: the main points

PRESIDENT CARTER proposed a five-point plan to end what he called the U.S.'s "national delusion" about inflation. "We cannot accept high rates of inflation as a permanent fact of American life," be said.

He claimed strong bipartisan backing for the programme in Congress and said it would be sufficient to cut inflation, as measured by the consumer price index, to single digits next year. The rate was 13 per cent last year and 18 per cent on an annual basis last month.

The Administration predicts a very slight recession later this year—with a quarter point drop in gross national product over the wbole year—and a slower-than - previously - expected recovery in 1981.

The five main sets of proposals are:

1—The Budget for the fiscal year starting in October will be cut by \$13bn, creating the first balanced budget for 12 years. Most of the new spending programmes, except bigher defence allocations, will be cut and there will be a freeze on federal government employment.

2-Credit controls: The President has reinforced the Faderal Raserve'a traditional powers to control money and credit expansion by empowering the Fed to establish limits of growth on credit carda and other forms of unsecured lending, Secured loans on cars, houses and other durable goods are exempt. The Government's own loan and loan guarantee programme is to be cut by \$4bn next year. One aim is to revive the rate

of saving. 3—Wage and price controls: Mandatory measures rejected, but tougher backing for the recently agreed 71-91 per cent annual wage increase standard for this year. Staff on the Council on Wage and Price Stahility will be trebled to 240 and monitoring stepped up.

4-Oil tax: A \$4.62 per barrel fee will be imposed on all imported oil and the cost passed on to the consumer entirely in petrol prices which will go up by 10 cents a gallon (about 8 per cent) as a result.

5-Long - term structural changes: Mr. Carter's Presidential Commission will produce an "agenda for the eighties" aiming to plan tax reductions and other means of stimulating flagging industrial productivity. Not, perhaps, the most fact-ful remark from a man in the

Stewart Fleming analyses the reasons behind the imposition of controls on consumer credit

Shock treatment for inflation psychology

SINCE the end of 1974, total credit in the U.S. economy has expanded from \$2,000bn to nearly \$3,700bn. Debt on family bomes bas more than doubled to \$800bn. Slowly it is being recognised that this expansion of borrowing has produced an "inflation psychology" — buy now, for tomorrow it will cost

It is this growing awareness, coupled with the increasing uncertainty about the ability of a gradually tightening Fed monetary policy to choke off credit growth, which helps to account for the new credit control proposals in the anti-inflation package.

Mr. Volcker insists that "the core of the Federal reserve programme remains traditional (monetary) restraint action," but on to this he bas grafted a special credit restraint programme which includes:

 Qualitative guidelines to commercial hanks as to which forms of lending the Fed feels to be most consistent with its monetary aims.

 A request that growth in loans at individual banks should not generally exceed the upper part of the Fed's 6-9 per cent target for the growth of total bank credit, coupled with a warning that the performance of banks with below average capital or liquidity ratios in meeting this target will be "especially

closely reviewed." A penalty surcharge of 3 per cent on discoont window borrow-

ALFRED KAHN has, he con-

fesses, "a certain irrational sense of failure," at having

Carter's Wage and Price Coun-

cil in a period when the rate of inflation has bounded from

But the emaciated economics

or other of the

professor, who has been amusing and scarifying some

Washington political scene for 40 years, believes there is reason in his unreason. "The

motion that any individual can

turn around the consumer

index is insane," he

g to 1g per cent.

President

requirement is calculated.

Understandably, given the consumer's role in continuing to for example) should have to put stimulate the economy much of aside special deposits of 15 per dence is growing bowever that the consumer's voracious appetite for new loans is easing.

Emerging weakness in specific sectors of the economy. notably housing and cars, has dictated that the Fed excludes lending related to these sectors from its restraints.

There are several reasons for the apparent weakening. Some bankers auggest that the consumer is beginning to discipline bla appetite for credit in the face of debt burden repayments which have risan to around 23 per cent of disposable income Others point out that in certain states the banks are

beginning to impose discipline. Some are beginning to withdraw credit cards because of rising losses from bad debts. In New York for example, usuary ceilings which limit the amount of interest customers can be charged have turned the

The credit card industry in the U.S. probably suffered a loss in the fourth quarter of sales to around 9.6m units this 1979, according to the president year. Even more serious for of Visa, one of the two main Detroit, the axtra tax will cank credit card organisations. further stimulate sales of This is why the Fed bas smaller cars, which the U.S. bank credit card organisations. further to 10 per cent in the marginal decided to require lenders of industry will not be producing ambit will increase the volume. The fear is that the oil tax will reserve requirement on the certain forms of consumer in large quantities until next of regulation which U.S., busi-be used to balance the budget,

banks coupled with a reduction unsecured personal loans and ment. The hidden loopbole, of markets closing to a wide range in the base upon which the secured credit, where the pro- course, is the near impossibility of companies, this growth will ceeds are not used to finance of rigorous policing. the collateral (second mortgages for example) should have to put

the focus of the new measures cent. in non-interest-earning is on consumer credit. Evi. reserve accounts with the Fed. This will raise the cost of funds to the lenders covered which include retailers petrol companies and travel and entertainment card companies.

But significantly, large sectors of the consumer credit market financing, are excluded, including car loans, insurance policy loans, with the tax paying season

of early relief from the pres-

sures of high interest rates. But

aome businessmen were bopeful

at the weekend that thre would

be some improvement in bond

There are three areas of

The petrol tax will mean a further 3 per cent fall in car

Businessmen

pricea this week.

likely effect:

But if there is evidence that the consumer credit growth is easing, in the corporate sector the opposite is the case. Since the beginning of the year bank lending to business has been growing at close to a 20 per cent annual rate and there have been dramatic increases in commercial paper issuance, another form of corporate short term

Many economists expect that gramme" as a second line of

Consumer Credit Cuthacks.

although limited in scope, are

bound to bave some marginal

effect on manufacturers of con-sumer goods. The disincentives

for expanded use of credit cards will also probably cut retail salea. Sears Roebuck, makes 55

per cent of its annual \$18bn

The strengthened wage-price

council. Although many business men do not take the

council seriously as an effective

inflation-fighting device, the trebling of the council's staff

and the inclusion of smaller

companies in its monitoring

sales via credit card.

managed liabilities of large credit including credit cards, and loans for home improve approaching and the bond continue.

The Federal Reserve's basic monetary policy, its monetary growth and credit growth targets, are aimed at constraining this credit expansion. But there have been so many failures of monetary policy as inflation has accelerated, even since last October, that it is scarcely surprising that the Central Bank is proposing a special credit restraint pro-

Scepticism on interest rates

The President's intention of

toughening up compliance with

the voluntary wage-price guide-

lines (the wage limit has just been set at a range of 71 10

94 per cent for 1980) could

In violation of the guidelines.

that the package is a step in the right direction, although

as to wbether Mr. Carter and

Congress really have the will-

power in an election year to

make serious expenditure culs.

Businessmen seem to think

also mean barring violators from federal contracts. Ford

sumption and reduce oil imports, which currently account for 44 per cent of the U.S. oil supply.
The fee will be levied on every barrel of imported oil, but its price impact will be chan-nelled exclusively into petrol. which accounts for about 40 per cent of all the oil consumed in the U.S. Eventually, Mr. Carter wants to replace the fee with an increase in the Federal excise tax on petrol from the present 4 cents to 14 cents, which will need Congressional approval

Mr. Carter's economists calcu-late that the fee will reduce oil imports by about 100,000 barrels a day in the first year, rising to about 250,000 b/d

in three years. The U.S. will probably consume 17m barrels of oil a day thia year, putting the saving at less than I per cent of the total in the first year, rising to about 2.a per cent in three years. However, Mr. Carter hopes that together with other conservation measures, the total saving this year will be about 400,000 barrels.

The fee idea has a lot of attractions. By jacking up prices, it effectively quickens the pace of the oil price decontrol programme which Mr. Carter launched last year to free demostic production from domestic production from regulation by October 1981. The fee should also look good abroad because it will ease the U.S.'s demands on the

world oil market, and bring petrol prices closer to those prevailing elsewhere.

U.S. PETROL PRICES IN CENTS PER U.S. GALLON
(Estimated averages of oil types
ond grades)
November 1978 65

June 1979 October 1979 May 1980 (FT estimote based on effect or oil price decontrol plus import fee

Mr. Panj Volcker Fed chairman

ing at the Federal Reserve by large banks with deposits of over \$500m. It will apply to banks which borrow for more than one week in a row, or more than four weeks in a calendar quarter. The basic discount rate remains at 13 per cent ao the surcharge rate will ba 16 per cent.

• The imposition of a new 15 per cent non-interest-bearing special deposit in increases in certain forms of consumer credit including credit cards (even those operated by retail stores) unsecured revolving credit and personal loans. An increase from 8 per cent

professor's position the morn-

ing after the President'a pub-

lication of his programme to beat inflation. Even less tact-

ful in the light of the approaching Presidential elec-

tion was his Cassandra-like aside that "the gods always make a person mad before

It did not take the eccen-

tricities of Mr. Kahn, however,

to inject a streak of March madness into the warm

Washington air this weekend.

Before the President was even on his feet in the East

Wing of the White House,

there was an audible patter

of tiny faux pas. Mr. Carter's top economic officials were

AKTIEBOLAGET SVENSK

Export Credit Corpo

U.S.S 734. NOTES 1983

S. G. WARBURG & CO. LTD...
amounce that the annual redemation
instatment of Bonds due 15th April.
1980, jor a nominal value of
U.S.S1.800,000 has been met by purchases in the market.
U.S.S1.2.400,000 nominal amount of
Bonds will remain outstanding after
15th April, 1930.
30. Gresham Street.
Lendon 6C2P 268.

17th March, 1980

they destroy him."

Audible patter of faux pas in the White House corridors

the non-depositary inter-mediaries, but when it came to figures, the madness

proved catching. First of all,

the men who had in the space of three weeks re-written a

budget, baving seen a flasb

of light about the inflationary

consequences of rising

Government expenditure and

widening federal deficits, revealed that they had con-

tinued to add up the figures

and figures.

with the Press, telling reporters all the things the President would find it too on the way to the Press briefing. So, half way through the proceedings, the men who are running the U.S. economy cumbersome to say from the podium, about such subjects as went into a quick buddle, assuring their andience: This is before the event, so non-depositary intermediaries The officials did well with

now we still have time to They then revealed that the new petrol tax would raise \$3bn in 1980, rather than \$5bn. Unfortunately, this change in the income forecast had consequences for figures further down the page. Soon the team was embroiled in an untidy and eventually caustic series of exchanges about the precise nature of those consequences. climaxing with remarks like: Yon have to learn your arithmetic" and "one minns one equals zero."

The East Wing andience did not bave the Press's advantage of having thus glimpsed the labyrinthine mathematical complexities of the budgetary exercise. So when the President said: "I will cut the 1981 budget by more than \$18bu," quite a few of the businessmen present were impressed.

Alas, the President meant to say \$13bn. Whether it was the arithmetical pressure or straightforward pressure state which had caused the

President's lapse cannot be certainly stated. Anyway it was nice to see him airlifted off to Camp David for the weekend, leaving Messrs, Kahn, Miller. Schultz, Mc-Intyre and Volcker to pick up the pieces with the media the following day. All but the ghostly and

suave Mr. Miller, the Treasury Secretary, looked as if they too could bave done with a weekend in the country. Mr. Schultz, another academie whose grey hair looks as if was glued on in the dark, sallied at one or two ques-tions. And at least the group

managed to avoid tripping

over the numbers.

COMPANY NOTICES

B.A.S.F. TRANSATLANTICA

71% 1972-1987 LOAN OF FF 100,000,000

The redemption on 1st May, 1980, for which a sum of FF 4,000,000 is planned, has been completely repurchased on the Stock Exchange.

Amount remaining in circulation after 1st May, 1980: FF 72,000,000

Paying Agent BANQUE DE PARIS ET DES PAYS-BAS POUR LE GRAND-DUCHE DE LUXEMBOURG

TORAY INDUSTRIES, INC. USS 74% GUARANTEED NOTES 1984 S. G. WARBURG & CO. LTD., announce that the first amoust instalment of Bonds des for redemption on 15th April, 1980, for a nominal value of U.S.35,000,000 has been met by porchases in the market.

U.S.527,000,000 nominal amount of Bonds will remain outstanding after Bonda will remain 15th April 1980. 30. Gresham Street. London. EC2P 2E8.

TELEFONAKTIEBOLAGET
L M ERICESON
. 81% BONDS 1989 VARBURG & CO. LTD., announce U.S.225.000,000 nominal amount of donds will remain outstending after 15th April, 1980. 30, Gresham Street. London ECZP 2ES.

LEUMI INTERNATIONAL INVESTMENTS N.V. ILS.520,000,000 GUARANTEED PLOATING RATE NOTES 1984 of the shortest rate applicable to the above in respect of the shortest particular 17th March 1980 has been at 18.875% per amount. The shortest amounting to U.S.596.47 ond of U.S.51,000 mpining artist to 18.472 are loosed of U.S.510,000 NK LEUMI TRUST COMPANY OF NEW YORK Principal Faving Agent

AKTIEBOLAGET SVENSK **EXPORTKREDIT** (Swedish Export Credit Corporation) U.S.\$ 91% Notes 1986

U.S.\$18.570.000 nominal amount of Bonda will remain outstanding after 15th April, 1980. 30, Gresham Street. London, EC2P 2EB.

LEUMI INTERNATIONAL U.S.50.000.000 GUARANTEED FLOATING RATE NOTES 1981
The interest rate applicable to the above Notes in respect of the six-month period commencing 17th March 1980 has been fixed at 18.875% our annument U.S.596.47 per bond of U.S.51.000 nominal and to U.S.596.47 per bond of U.S.51.000 nominal and to U.S.596.47 per bond of U.S.596.40 nominal will be paid to Wednesday 17th September 17th 1891 persentation of No. 5.
BANK LEUMI TRUST COMPANY
OF NEW YORK
Principal Paying Agent

CLUBS

TRAVEL

GENEVA, Basie, Zorich and Berne, wider choice of cheap Mights from 4 U.K. air ports, Brochure FALCON 01-351 2191

BOND DRAWINGS

THE COPENHAGEN COUNTY AUTHORITY (C.C.A.) On March 3, 1980, Boods for the amount of UA 1,250,000. have been drawn for redemption in the presence of a Notary Public.
The Bonds will be reimbursed coupon no. 12 and following attached on and after May 9, 1980.
The drawn IN Bonds are those, NOT YET PREVIOUSLY RECEEMED. Included Brileg at: 1942 up to 1768 laci.

mortised: UA 5,750,000.

OUTSTANDINO ORAWN BONUS
9837
10747
10909 to 10013 lnci.
10042 to 10944 lnci.
11004 and 11008
lnci. 11118 and 77116
lsci. 27145 to 11147 lnci.
11539 10016 10388 and 10857 10512 to 10020 Incl. 10081 to 10983 Incl. 11014 to 11027 Incl. 756 and 9757 and 10927 12879 12879 13488 to 13471 Incl. 13598 13722 13902 12660 12818 and 12879 15161 13483 and 13484 snd 12408 to 12755 Incl. snd 12923 The Trustee KREOIETBANK

DIAMOND CAPITAL LTD. Registered Office: . 20 Broad Street, Monrovia (Liberia)

be annual deltal Los. Winteractions of control of the history of t

LEGAL NOTICES

THE COMPANIES ACTS 1948 TO 1967 THE COMPANIES ACTS 1948 TO 1957

HELENE MICHEL LIMITED

NOTICE IS HEREBY GIVEN that the Creditors of the above-named Company are required on or before the 17th day of April 1880, to send their names and addresses and the particulars of their days of the same sand addresses of their Solicitors if any, to Keith David Goodman, FCA, of 3/4 Sentinck Street, London WIA 38A, the Liquidstor of the said Company, and, if so required by notice in writing from the said Liquidstor, are by their Solicitors, or personally, to come in and prova their said days or claims at such time and place as shall be specified in such motice, or in default thereof they will be excluded from the benefit of any distribution made before such debts are proved.

Deted this 6th day of Merch 1980.

K. O. GOODMAN, Liquidstor.

S. H. JACKSON (FASHIONS) LIMITED NOTICE IS HEREAY GIVEN pursuant to Section 293 of the Companies Act, 1948, that is Meeting of the creditors of S. H. Jeckson (Fashlona) Limited will be held et the offices of Leoneric Currie & Co., situeted at 3/4 Berminck Street. London WIA 38A on Tuesday the 25th day of March 1980 et 12 o'dock middey, for the purposes provided for in Sections 294 end 295.

Detail the 6th dey of March 1980.

B. R. RYMAN (Mrs.), Director.

THE COMPANIES ACTS 1948 to 1967

AUFFUSE LIMITED

NOTICE IS HEREAY GIVEN, pursuant to section 293 of the Componies
Act 1948, Ihat a Meeting of the
Creditors of the above-named Company will be held at 1 Love Lans,
London E.C.2, on Tuesday, the 25th
day of March, 1980, at 12 noon, for
the purposes mentioned in acctions
294 and 295 of the seid Act.

Oeted this 11th day of March, 1980.

Sy Order of the Board
RITH SCOTT
Secretary

EDWARD CLOTHIERS (HACKNEY) EDWARD CLOTHIERS (HACKNEY)
LIMITED

NOTICE IS HEREBY GIVEN pursuant to
Section 293 of the Compenies Act, 1948,
that a Mosting of the creditors of
Edward Clothiers (Hackney) Limited,
will be held at the offices of Leonard
Curtis & Co., atwarted at 3/4 Becclinck
Street, London WIA 3BA on Thursday
the 27th day of March 1980 at 12 o'clock
midday, for the purposes provided for
in Sections 294 and 295.

M. KAYE, Okector.

M. KAYE, Okector.

STUART BELL & COMPANY LIMITED
NOTICE IS HEREBY GIVEN pursuent to
Section 293 of the Companies Act, 1948,
that a Meating of the creditors of Stuart
Rell & Company Limited, will be held
at the officos of Lannerd Curtis & Ca.,
3/4 Beninck Street, London WIA 3BA,
on Tuesday the 29th day of March 1980
at 10.30 o'clock in the forenoon, for
the purposes provided for in Sections
294 and 295.

Dated the 6th day of Merch 1980.
B. R. RYMAN (Mrs.), Oirector.

Notice to Shareholders of **INVESTMENT PROPERTIES** INTERNATIONAL LIMITED

(in liquidation)
A first liquidation distribution of U.S.\$4 per share will be made to shareholders of Investment Properties International Limited forthwith after validation of shareholders' claim. All registered and bearer shareholders should send their name and address to the Liquidator (using the box below) for the required forms and procedures to be followed by a shareholder in order to have his claim validated and to receive this distribution. MacPherson Hubbell, F.C.A.,

Permanent Liquidator,

c/o Price Waterhouse and Co., P.O. Box 51, Toronto Dominion Centre, Toronto, Canada M5K 1G1 This notice is directed only to shareholders of IPI and not of any other company within the I.O.S. group.



Azienda Autonoma delle

Ferrovie dello Stato U.S. \$ 300,000,000

medium term financing

constituting a direct and unconditional general obligation of

The Republic of Italy

managed by

BANQUE BELGE LIMITED / CANADIAN IMPERIAL BANK OF COMMERCE SOCIETE GENERALE DE BANQUE S.A.

CRÉDIT LYONNAIS THE FUJI BANK LIMITED

CRÉDITO ITALIANO LLOYDS BANK INTERNATIONAL LIMITED THE MITSUBISHI BANK LIMITED

MIDLAND BANK LIMITED THE ROYAL BANK OF CANADA (LONDON) LIMITED

co-managed by

BANQUE INTERNATIONALE A LUXEMBOURG S.A. CENTRALE RABOBANK CONTINENTAL BANK OF CANADA

provided by

BANQUE BELGE LIMITED CANADIAN IMPERIAL BANK OF COMMERCE CREDIT LYONNAIS CREDITO ITALIANO THE FUJI BANK LIMITED LLOYDS BANK INTERNATIONAL LIMITED MIDLAND BANK LIMITED THE MITSUBISHI BANK LIMITED THE ROYAL BANK OF CANADA GROUP SOCIETE GENERALE DE BANQUE S.A. BANQUE INTERNATIONALE A LUXEMBOURG S.A. CENTRALE RABOBANK CONTINENTAL BANK OF CANADA BANQUE FRANCO ALLEMANDE S.A. THE COMMERCIAL BANKING COMPANY OF SYDNEY LIMITED HAMBURGISCHE LANDESBANK-GIROZENTRALE INTERNATIONAL TRADE AND INVESTMENT BANK S.A. (LT.I.B.)

Agent CRÉDIT LYONNAIS



February 15, 1980

The Nippon Credit Bank, Ltd. Negotiable Floating Rate U.S. Dollar

Certificates of Deposit

Maturity date: 17 March, 1981

in accordance with the provisions of the

given that for the initial six month interest

period from 17 March 1980 to 17 September:

1980 the Certificates will carry an Interest,

Agent Bank
The Chase Manhattan Bank, N.A.,

London.

NOTICE OF RATE OF INTEREST

U.S.\$25,000,000

SUMITOMO HEAVY INDUSTRIES, LTD.

Guaranteed Floating Bate Notes Due 1983

Unconditionally guaranteed as to payment of principal

and interest by

THE SUMITOMO BANK, LIMITED

(Incorporated with limited liability in Japan)

In accordance with the provisions of the Notes and Agent Bank Agreement between Sumitomo Heavy Industries Ltd., The Sumitomo Bank Ltd., and Citihank, N.A., dated March 7, 1978, notice is hereby given that the Rate of Interest has been fixed at 181% p.a., and that the Interest payable on the relevant Interest Payment Date, September 16, 1980 against Coupon No. 5 will be U.S.\$96.47 and has been computed on the actual number of days elapsed (184) divided by 360.

(Incorporated with limited liability in Japan)

Certificates of Deposit notice is hereby

Rate of 18% % per annum.

Higher prices and volume boost Svenska Cellulosa

The proposed dividend of SKr 6.50 per share for 1979, up from SKr 5.50 following adjustment for last year's split, totals SKr 78m. Net adjusted return per share increased from SKr 13

Sales rose by 16 per cent to

Sandoz ahead

By John Wicks in Zurich GROUP PROFITS of the Sandoz chemical group rose by

10.9 per cent last year to SwFr

173m (\$98.3m). Earnings were adversely affected by inflationary pressures, which were off-

from SwFr 127m to SwFr 62m. despite a further strengthening of the Swiss franc.

The cash-flow for the group-

which, it was announced in

January, increased its turnover

by 3.4 per cent to SwFr 4.44hn

(\$2.52bn) in 1979—was up 5.3 per cent to SwFr 432m. Capital

nvestments, down SwFr 26m to

SwFr 207m, were financed entirely from a depreciation

sum of SwFr 259m. Research

and development spending was slightly higher, at SwFr 386m.

the equivalent of 8.7 per cent

GOLD

only partially hy higher selling prices. However, foreign-currency losses dropped

in spite of

inflation

operating earnings from ing profits.

SKr 69m to SKr 79m, on sales of SKr 1.77bn, up 13 per cent. The Bakah power generating company had operating earnings of SKr 178m, up from SKr 125m, on sales that ross 21 per cent

Sunds Defibrator, the manu- predict.

Mölnlycke, a subsidiary that Defibrator, Bakab and the makes household paper and packaging companies having hospital products, improved its excellent prospects of improv-

The forest sector will do decidedly better in the first half of 1980 than in the corresponding period of 1979, the preliminary report continues, but second half prospects for this sector are more difficult to

Advance at Exxon-BHP

from A\$64m to A\$88.5m.

The improvement came from higher crude oil and liquefied petroleum gas (LPG) prices and record levels of crude, LPG

The return on the group's total average assets employed of A\$874m was 13.6 per cent. Exploration development and other capital expenditure is plant totalled A\$109m, or almost as A\$254m to much as the group's profit, the the current directors pointed out. They the assets.

Gold's soft centre by COLIN MILLHAM

ESSO EXPLORATION and said that the incentive provided Production Australia, a 50 per by the Australian Government's cent partner with Broken Hill crude oil pricing policy led the Proprietary Company in the company to increase signifi-Proprietary Company in the Bass Strait oil and gas fields, cantly expenditure on exploralifted its profit 35 per cent from (US\$130m) in 1979. The dividend to the U.S. parent, Exxon Corporation has been raised from A\$64m to A\$88.5m

the partners spent in 1978. The partners' exploration and development plans for the Bass Strait over the next four years would cost another A\$1.2bn.

Tire lifts

or C\$2.49, a year earlier. Revenues rose by 17.2 per cent to C\$935m (U.S.\$794m), from C\$798m. The figures for each year exclude extraordinary

maintenance and upgrading, providing growth to the group's do-it-yourself products.

division plan

custom design semiconductors but will continue to procure standard chips from external

Mr. R. A. Ericsson, previously vice-president in charge of

Canadian

CANADIAN TIRE Corporation the major Canadian merchandising group, increased its earnings by 27.2 per cent to C\$36.5m (U.S.\$31m), or C\$3.07 a share, in 1979, from C\$28.7m,

Profit for the final quarter was equal to 61 cents a chare against 55 cents. The group is the largest merchant of home and sutomobile equipment through franchised stores. In the present year, lower spending on new homes and cars is expected to shift volume to

Sperry Univac semiconductor

SPERRY UNIVAC, the computer products division of Sperry Corporation, is to establish a new semiconductor division, and plans a \$50m expansion, in its integrated circuit sion in its integrated circuit capacity at Egan, Minnesota. The new division will produce

vendors. The chips will be pro duced colely for Sperry's own The division will be headed by

Sperry's defence division. Mr. Ericsson said that the new

John I.)...Mar. 18 Johnsen and Firth Brown...Mar. 18 Int. 1.3 *Klainwort Benson...Apr. 2 IsdbreksApr. 5 Final 3.51 Laird Gp.Apr. 2 Final 3.52 *LASMOMar. 25 Final 0.8 E Udy****** pusy Mar] Results dua RECENT ISSUES

Jacobs (Jehn I.)...Mar. 19 Final 1.35

EQUITIES

Istue Price pt	Amount Paid Up	Latest Renune. Date	187 High	9/80 Low	Stock	Price Price	+ 01	Amount Times	Orose Vield P.E. Ratio
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FIXED INTEREST STOCKS

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t	44 H 1501		2910 2910	37p 122pm 98p 112 8% 97 12	100p 93. 111 714	Aurora 3.86% Cum. Pref. Clifford(Chas.) 12% Cliff. Pref. Felixatowe Dook 86% Cum Red Pref. Globe Inv Tat 111% Conv Uns Ln '90-90. Mid Kent Water 9% Red Pref. 1985. Rk'm'nw'n & Uxbridge Wtr. 9%RdPf 1986, Sutton Olstrict Water 10pcRedPref.1883	1185 9512 111 712 95	
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"RIGHTS" OFFERS

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Ranunciation date usually last day for dealing free of stamp duty. b Figures based on prospectus estimats. g Assumed dividand and yield. u Forncest dividand: cover based on previeus year's earniegs. F Dividand and yield based en prospectus or other official estimates for 1979. Q Gross. T Figures assumed. Cover allows fer conversion of shares not now ranking for dividend or ranking enly for restricted dividends. § Placing price to public. pt Pence unless etherwises indicated. I leasued by tander. I Offered to holdsm of erfinary shares as "righto." " lasued by way of capitalisation. §§ Raintroduced. If leaved in connection with reorganisation, merger or takeover. II introduction. I leaved to former preference holdsrs. Mallotment letters (or fully-peld). • Provisional or party-peld allotment lettem. * With warrents. † Unlisted security. # Issued as units comprising 2 participating prat. shares and 1 ord. share at R3.50 per unit. † Dealings under speciel ruin.

BASE LENDING RATES

A.B.N. Bank 17 %	7 Hambros Bank 17 %
Allied Irish Bank 17 %	
Amro Bank 17 %	E Hill Samnel
American Express Bk. 17 %	Hongkong & Shanghai 17 %
Henry Anshacher 17 %	Industrial Bk. of Scot. 171%
A P Bank Ltd 17 %	Keyser Ullmann 17 %
Arbuthnot Latham 17 %	Knowslev & Co. Ltd 181%
Associates Cap. Corp. 17 %	Langris Trust Ltd 17 %
Banco de Bilbao 17 %	Lloyds Bank 17 %
Bank of Credit & Cree. 17 %	Edward Manson & Co. 18 %
Bank of Cyprus 17 %	Midland Bank 17 %
Bank of N.S.W 17 %	■ Samuel Montagu 17 %
Banque Belgs Ltd 17 %	- 70
Banque du Rhone et de	Morgan Grenfell 17 % National Westminster 17 %
la Tamise S.A 171%	Norwich General Trust 17 %
Barclays Bank 17 %	
Bremar Holdings Ltd. 18 %	_
Brit. Bank of Mid. East 17 %	Rossminster 17 %
Brown Shipley 17 %	Ryl. Bk. Canada (Ldn.) 17 %
Canada Perm't Trust 18 %	Schlesinger Limited 17 %
Cayzer Ltd 17 %	E. S. Schwab 17 %
Cedar Holdings 17 %	Security Trust Co. Ltd. 18 %
Charterhouse Japhet 17 %	Standard Chartered 17 %
Choulartons 17 %	Trade Dev. Bank 17 %
C. E. Coates 17 %	Trustee Savings Bank 17 %
Consolidated Credits 17 %	Twentieth Century Bk. 17 %
Co-operative Bank*17 %	United Bank of Kuwait 17 %
Corinthian Secs 17 %	Whiteaway Laidlaw 171%
The Cyprus Popular Bk. 17 %	Williams & Glyn'o 17 or
Duncan Lawrie 17 %	Wintrust Secs. Ltd 17 oc.
Eagil Trust 17 %	Yorkshire Bank 17 %
	Members of the Accepting Houses
	Committee.
First Nat. Fin. Corp 181%	• 7-day deposits 15%, 1-month
First Nat. Secs. Ltd 18 %	deposits 154%.
Robert Fraser 18 %	† 7-day deposits on sums of P10 000
Antony Gibbs 17 %	and under 10%, up to £25,000 154% and over £25,000 157%.
Greyhound_Guaranty 17 %	15% and over £25,000 167%.
Grindlays Bank	# Call daposite over £1,000 15%
Guinness Mahon 17 %	§ Camend deposits 15%.

CORAL INDEX: Close 437-442 (-7)

I.G. Index Limited 01-351 3466. Three months Gold 530.5-539.5 29 Lamont Road, London SW10 0HS. Tex-free trading on commonly rutures.
 The commodity futures market for the small investor.

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PENDING DIVIDENDS

CITIBAN(LOCAL AUTHORITY

Every Saturday the Financial Times publishes a table giving details of LOCAL AUTHORITY BONDS

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OFFSHORE & OVERSEAS—contd.

March 17, 1980 -

By: Citibank, N.A., London

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Unitife Assurance (Overseas) Ltd. P.O. Box 1388, Hamilton 5-91, Bernada

BY VICTOR KAYFETZ IN STOCKHOLM SVENSKA CELLULOSA, As a result of price increases facturer of forest industry Sweden's biggest forest products and volume growth, the forestry equipment, however, moved

group, has reported pre-tax and volume grown, the forestry equipment, however, moved and forest product sector raised from an operating profit of skr 537m (\$125m) its operating profit from Skr 5kr 12m to a loss of Skr 10m. Skr 1978 figure of Skr 273m, and comfortably above the October cent to Skr 3.06bn. forecast of SKr 450m.

SKr 5.97bn (\$1.39bn). Operating profits climbed from SKr 307m to SKr 559m, and stock gains from SKr 17m to SKr 77m.

venture in Bass Strait

CURRENCIES, MONEY and GOLD

BY JAMES FORTH IN SYDNEY

and natural gas production, the directors said.

Mar. 13

equipment. This was A\$54m more than

The profit was after royalties, income and other taxes of

A\$233m. The directors revealed that Esso had revalued pany to make greater use of its plant and equipment by research and development pro-A\$254m to reflect more clearly grammes, and that its establish-the current replacement cost of the assets.

IN THE eight weeks leading up to the peak of \$850 on January 21 gold rose by \$455, and in the same period since it has fallen by \$320. On Friday the metal opened at \$4321, and fell quickly to \$497, the lowest level since Christmas Eve.

The January "gold rush"

January, hnt last Friday prices to the peak of \$850 on January 21 gold rose by \$455, and in the respectively.

Gold's sharp fall—it lost over Western economies, led to a district trust of paper currency at 8 great trust of paper currency at 8 g

Christmas Eve.

The January "gold rush" the upsurge in world interest rates.

Tates.

Borrowing money to buy gold is now very expensive in the U.S. and the effect on the bullion market was dramatic. Much is now very expensive in the U.S. interest rates, and here and Europe. Since the hegiming higher U.S. interest rates, and here are dispatched to the melting pot for scrap value. The media's interest in precious futures trading in the U.S. and before.

Almost inevitably some of and West remain, if the Russians these funds were turned into gold, and the effect on the bullion market was dramatic. Much is unlikely to fall very far hopes that the Carter Adminimover \$200 in less than two months.

On the other hand another flashpoint is likely to create a further rise, and on Friday afternoon encouraged to sink savings into pold coins earlier this year musi rue the day.

Krugerrands were offered at E370 and sovereigns at £95 in made the dollar much more again.

The investment intentions of the market showed signs of the marke

OTHER CURRENCIES

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has changed the picture yet

Mar. 14	2	*		Note Rates
Argentina Peso		1781-1728	Austria	28.80-29.05
Australie Dollar	B.0915-2.0255	0.9140-0.9145	Belglum	57.50-68.00
Srazil Cruzeiro	102,85-103,86	48.60-45.80	Denmark	12,63-15,70
Finland Merkka	0,53-8.64	3.8620-3.8640	France	9.40-9.46
Greek Orachma	67,958-90,039	95.60-40.00	Oermany	4.041-4.07
Hong Kong Dollar		5.0040-0.0090	Italy	1860-1905
ran Rial		n/a	Japan	550.555
Kuwait Olnar(KD)	0.605-0.015	0.2760-0.2761	Netherlands	4.444.4.47
Luxembourg Frc.	66.05-66.15	29.84-25.86	Norway	11.13-11.80
Malaysie Dollar		2.2140-5.2170	Portugal	10612-11012
New Zealand Dir.k	2.3070-2.S120	1.0495-1.0440	Opein	1454-1054
Saudi Arab, Rival.	7.32-7.42	5.3400-3.3450	Sweden	5.55 5.60
Singepore Dollar.		2,2030.5.2060	Switzerland	5.88-3.90
Sth. African Rand		0.8090-0.8100	United States	9,200-2,208
U A.E. Olrham		3.7345-3.7365	Yugoslevia	50-5112

THE POUND SPOT AND FORWARD

66,05-65,10 12,63-12,64 1.0965-1,0975 4.05°-4.06°-1 103,50-109,70 182,75-152,85 1,834-1,835 11,12°-1,13°-2 5,46°-3,9-47°-4 9,68°-9,59°-2 551-552 29,08-29,13 2,88-2,89

0.32-0.42c dis 0.85-0.75c pm

metals has not continued as cent to 18 per cent and above, values have fallen, but those encouraged to sink savings into pold coins earlier this year musi attractive from the point of view

Gold Bullion (fine ounce) (£2374-24134) (£240-2481₂)

Mer. 14

THE DOLLAR SPOT AND FORWARD

† UK end Ireland era quoted in U.S. currency. Forward premiums and discounts apply to the U.S. dellar and not to the Individual currency.

Belgian rate is for convertible francs. Financial franc 68.20-68.30. **EURO-CURRENCY INTEREST RATES** The following nominal rates were quoted for Londen dollar certificates of deposit one-month 18.55-18.55 per cent three-months 18.90-19.00 per cent; all months 18.90-19.00 per cent; one year 17.50-17.60 per cent.

Dutch Guilden Swiss Franc Stariino U.R.Dollar 131₈-18₅₆ 131₈-18₅₆ 191₈-191₈ 151₈-191₈ 19-191₄ 177₈-181₈ 81g-91g B1g-91g 1514-156g 141g-147g 15-154g 15-163 10-1014 1014-1018 1058-1078 1119-1154 1B18-1956 1212-1954 101₂-111₄ 121₂-123₄ 14-144 13-10 154-15a 177g-18 18% 18% 18%-18% 17%-17%

LONDON MONEY RATES

Mar. 14 1980	Sterling Certificate of deposit		Local Authority deposits	Local Auth. negotiable bonds	Finance House Deposits	Company Deposits	Discount market deposits	Treasury	Eligible Bank Bills &	Fine Trade Sills 9
Overnight 2 days notice 7 days or 7 days notice One month Two months	- - 1736-1718 1766-1736	15-18% 184-185 176-175 178-175	1756-1778 1754-1818 1778-18	1834-1812 1855-1844 1818-17%	18 18 18 18	1684 — 1714-1749 1734 18-181 ₈	166 ₈ 1	=	1713 778 1758	1856 181 ₈ 177 ₈
Three months Six months Nine months One Year Two years	17/1-16/6 1012-16/6 16/3-1618	17 6 17 6 17 6 17 4 16 6 10 4 16 6 16 8	17 ¹ g-175g 16 ³ q-17 ¹ g 18 ¹ g-16 ⁵ q	172-157- 174-107- 17-184	171 ₂ 171 ₈ 17	1818		-	168 — —	16 <u>1</u>

Approximate selling rates for pna-month Treasury bills 1572-1672 per cent; two-months 10 59-64ths-15 per cent; three-months 18 5-64ths-1672 per cent; Approximate selling rates for one-month bank bills 1772, per cent; two-months 1772 per cent; and three-months 1772 per cent; one-month trada bills 1873 per cent; two-months 1774 per cent; and three-months 1774 per cent; one-month trada bills 1873 per cent; two-months 1774 per cent; and three-months 1774 per cent.

Financa Houses Bass Rates (published by the Financa Houses Association) 18 per cent from March 1, 1980. Clearing Bank Deposit Rates for sums at seven days notice 15 per cent.

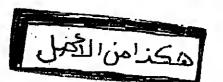
Classing Bank Rates for landing 17 per cent. Treasury sills; Averege tender rates of discount 18.1132 per cent.

CURRENCY RATES 5,85656 1164,84 538,81₁ 6,86951 94,0808 5,90728

P.a. months

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9.18 22-12 pm
-5.80 83-10-dis
0.55 0.10-0.05 pm
-4.65 50-120 dis
-11.78 306-565dis
-11.78 308-565dis
-12.39 12-14 dis
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2.53 5-42 pm
7.63 63-57 pm

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Financial Times Monday March 17 1980

SURVEYORS VALUERS AND AUCTIONEERS

FINANCIALTIMES

Monday March 17 1980

WHO CARE I

Import control proposals attacked

By Peter Riddell, Economics Correspondent

PROPOSALS FOR general controls on imports into the UK were strongly criticised by several of Britain's leeding economists at a recent meeting et the Bank of England.

Absence of widespresd pro

fessional support for the protec-tionist cese is significant at a time when general import controls ere being urged in-creasingly by the TUC sections of the Labour Party, and e few Tory backbenchers.

The discussion was at a meeting of the Benk's panel of academic economists. The panel meets quarterly to discuss pelicy issues, under cheirmanship of Professor Robin Matthews, of

Cambridge University.
Other members include Mr.
Micbael Posner, from Cembridge, Mr. Michael Stewart, from University College, London, Prof. Micbael Artis, from Manchester, Prof. Harold

Rose of Barclays Bank, end senior Bank economists. The protectionist case was put forward by Mr. Wynne Godley, head of the Cambridge Economic Pollcy Group of economists. His views were analysed by Mr. Maurice Scott, of Nuffield College, Orford.

Papers submitted to the meeting show that the debste turned on the relative merits of proend devalution as a means of achieving lower un-

employment. Mr. Scott argued that there was a serious daoger of retaliation; that inflation would acce-lerate if demand was expanded with import restrictions; while higher tariffs would undermine efficiency and would not mean non-discriminatory protection

In contrast, Mr. Scott maintained that devaluation could be less inflationary, and would avoid the dangers of retailation and the inefficiencies of high

In reply, Mr. Godley questioned bow devaluation could or should be implemented now. He stressed that the discussion should compare present policles with alternative and should be conducted in the context of what he helieves to be a ly serio ment for the UK economy." Mr. Godley argued that there was comon ground in "rejecting as wholly perverse the present Government's strategy, which is to generate a substan-tial real appreciation of

Weather

London, S.E., Cent. and Cent. N. England, E. and W. Midlands, Channel Isles

Mostly cloudy, mainly dry. Cold. Max 6C (43F). E. Anglia, E. and N.E. England Mostly cloudy, drizzle or sleet et times. Cold. Max. 5C (41F). S.W. and N.W. England, N. and S. Wales, Lake District

Cloudy, some rain, snow on hills. Cold. Max. 8C (46F). Isle of Man, Argyll, Central

Highlands, S.W. and N.W. Scotland, N. Ireland Cloudy, rain or showers, snow mainly on hills. Bright intervals. Cold. Max. 6C (45F). Borders, Edinburgh, Dundee, Aberdeen, Moray Firth, Orkney, Shetland

Cloudy, rain, snow mainly on hills. Cold. Max. 4C (41F). Outlook: Generally cold

WORLDWIDE

Italian Government may fall this week

BY RUPERT CORNWELL IN ROME

THE ITALIAN minority Government of Sig. Francesco Cossiga seems likely to fall in the next few days after barely seven months in office.

The outcome of a final flurry of inter-party manoeuvring in to produce a new small car Rome is that the Prime Minister in Southern Italy, will bave to will probably face a Parliamencome from a special Ministerial tary vote of confidence leter this committee. This will decide week. If, as expected, the Socialist end Republican parties whose previous abstention kept Sig. Cossiga in office-oppose him, the country's 42nd government crisis since the war

The new crisis promises to be as difficult as eny to solve. The renewed political vacuum will do nothing to help Rome's tenure of the EEC presidency and Italy's job of finding solu-tions to key Common Market

The gathering storm did not prevent the Cossiga Cabinet taking two major decisions at allegedly irregular commission the weekend. It appointed a payments, totalling \$115m, new president for the troubled made by ENI in last year's oil

put on ice the controversial deal between state-owned car manufacturer Alfa-Romeo and Nissan of Japen.

Final approvel of the venture, committee. This will decide whether the arangements are in the best interests of the Italian motor industry. lest word would then be with the Government.

The Cabinet's ection is a tectical victory for Fiat, the biggest Italian producer, which is bitterly hostile to the Alfe-Nissan deal. It is likely that ratification of the agreement, which seemed imminent, will be postponed for a few weeks while . Fiat's counter-proposals are further examined.

The Cabinet also geve its ver-dict on the scendal over the

state energy agency ENI and supply deal with Saudi Arabla,

On the basis of a special the Government that Sig. Giorgio declared Mazzanti, the president of ENI, who was suspended while the contract was investigated, wes not guilty of misconduct. None-theless, he was obliged this weekend to offer his resignation, and the Cabinet nominated as his replacement Sig. Egidio Egidi, brought in es special com-missioner to run the group during Sig. Mazzenti's suspen-

Thus ends a fiasco which badly damaged morale in a key public sector enterprise.

Four months of inquiry bave failed to produce any convinc-ing explanation. All that is certain is that the ENI affair was largely due to fighting in the Italian Socialist Party, whose feuding Left and Right wings bave sunk their differences to demend the end of tha Cossiga

Pressure mounts on Britain

BY JOHN WYLES IN BRUSSELS

BRITAIN could come under strong behind-the-scenes pressure this week to moderate its EEC budget demands before the summit meeting of heeds of government in Brussels in two

Senior officials in the Com-mission and the Italian Government, which currently holds the presidency of the Community, fear that the summit could be a diplomatic disaster unless there are significant changes of position in London and Paris.

Problems grew last week when the French Government issued a declaration implying that it might refuse to discuss the UK's budget contribution,

strong criticism at a meating of permenent representatives on

Italian officials say they have received assurances that the French will not try to block discussion, Indeed, Italy believes that a settlement reducing the UK's £1.2bn net payment .to Brussels can still be found, providing Britain backs away from demands for a guaranteed share of EEC spending until 1986.

But Britain is reluctant to accept anything which risks having to raise the problem again in three or four years. However, there are few Community officials who believe that Then more detailed UK pro- the UK can obtain anything

posals for a settlement drew more than a lump sum of Community expenditure, spread over

On this basis, coupled with UK concesssions on lamb, it is said that the Community be persueded to reduce the UK's budget burden this year by up

There is likely to be some perfunctory discussion on the subject when EEC Finance Ministers meet in Brussels today, and Foreign Ministers tomorrow. More important for the way in which events may unfold was yesterday's meeting in Hamburg between Presiden Giscard d'Estaing of France and Chancellor Helmut Schmidt of

Editorial comment, Page 10

£185m Irish telephone orders

BY GUY DE JONQUIERES

THE Irish Government has cent of the orders each-which exchanges, many of telephone switching equipment worth at least Ir£200m (£185m) with CIT-Alcatel of France end. L. M. Ericsson of Sweden. The orders are the first phase of an ambitions five-year

programme to modernise Ireland's national telephone network et a total cost of mora than Ir£650m. They were won against fierce competition from more than balf-a-dozen international bidders.
Britain's highly advanced
System X exchange, developed

jointly by the Post Office, General Electric Company, Plessey end Standard Tele-phones and Cables, was not entered in the bidding because the compenies involved would been able to meet the

ment required for the pro-gramme—and that the balance will go to the supplier judged to have performed better. The CIT-Alcatel contract was

announced by Mr. Charles Haughey, the Irish Prime Minister, on an official visit to Paris.
A substantial part of the cost
will be probably financed
through low-interest bilateral loans which France offered Ireland as en inducement to join the European Monetary System early lest year.

In addition to the French loans, the Irish telephone pro-gramme will receive significant financial support from the EEC

cent of trunk switching and 50 per cent of aubscriber switching making Ireland'a telephone system among the most advanced in Europe.

Both Ericsson and CIT have undertaken to make much of in the form of regional fund. In Ireland, which it will convert grants and lending by the to digital switchgear manufac-European Investment Bank. turing, while CIT plans to set

mechanical trunk exchanges will be replaced by modern electronic digital switching equipment. The Government wants installation of exchanges to begin next year.

It is estimated that when the programme is completed, 70 per will be performed electronically

the required equipment locally. Ericsson alreedy bas a factory timets ble laid down by the Irish
Government.

The scheme calls for doubling up a plant near Cork in partner, the number of telephone subscribers in Ireland to more than ted to receive initially 40 per 1m by 1985. About 500 local mission equipment.



MANY Conservative MPs may refuse to support the Govern-ment's call for a boycott of the Olympic Games in Moscow this summer unless it is matched by further trade sanctions against the Soviet

Union.
Ministers will face demands during the Commons debate today for the cancellation of trade credits, a ban on the export of goods and materials which could help the Soviet campaign in Afghanistan, and an end to the sale of hntter and other EEC surpluses to the USSR.

Twenty Conservative MPs have signed an amendment to the Government's boycott mution, insisting British sthletes should not bear the brunt of its retaliation against the Soviet Union alone. The

Mr. Terence Higgins, a former Tory Treasury Mini-ster and Olympic runner, and chairman of the party's Parlia-

The Government has not renewed the special credit

e firm commitment from her EEC partners to end sales of butter, meat and sugar to the Soviet Union, though curbs on grain exports have been

Mr. Donglas Hurd, Minister of State at the Foreign Office, will attend talks in Geneva tnday aimed at devising an alternative international sports competition to the Olympic Games. The conference will be

attended by representatives of the U.S., Australia and other

on Olympic boycott call

move is expected to ettract wide support on the Conserva-tiva backbenches.

mentary committee on sport, said yesterday: "Backbench MPs would be far more prepared to support the call for a boycott if they were convinced that effective action was being taken in other fields as well." He predicted "many absten-tions" if the Government did not agree to trade sanctions.

renewed the special credit agreement with the Soviet Union which expired last month. Credit arrangements are being considered on a case-by-case basis.

Tighter application of the rules governing the transfer

of sensitive technology to the USSR is still under discus-

Britain has not yet secured agreed.

The British Olympic Association has sent a statement to all MPs antlining its opposition to a boycott. It accused the Government of using sport as a political weapon without

Japanese discount rate set to reach 9%

BY RICHARD C. HANSON IN TOKYO

TH EBANK of Japan appears low rate of 3.5 par cent. set on raising its official dis-count rate by a sharp 1.75 per cent to 9 per cent early this week after agreement on other interest rates is reached with concerned parties. The increase will bring Jepanese interest rates to tha level reached after It will ha the fifth increase

in 12 months, from an all time private sector.

Later in the same week, othar anti-inflation measures are expected to be sunounced, mostly eimed at holding down the rate of government public works expenditure, raising the reserve requirement of deposits tighten credit more, end limiing price increases in the

Two weeks ago authorities trends in the economy. The announced a aeries of measures to bolster the currency but these so far have proved only moderately successful in reversing the downward trend of the

motivated primarily by concern over the present inflationary in the year.

Ministry of Finance now feels that consumer inflation could be close to double figures this year. The economy has shown

unexpectedly rohust growth and Judging from past official the worry is that continued thinking, this large increase in growth now will exacerbete the discount rate will be inflation just when the economy finally begins to slow down later

Carter reaction Continued from Page 1

in Government spending the Administration bas left little or no room for subsequent tax fall most beavily on the poor. cuts designed to increase proaenior officials made clear that such incentives would come only after progress toward greater price stability bad been

Labour spokesmen were outreged by both the proposed spending cuts end by Mr. Carter's imposition of a \$4.62 fee on imported oil. Some threatened to withdraw their co-operation from the

Government's voluntary wage end price programme. On the political side, the President received some com- to affect most deeply the cities mandation for having taken such

austerity in proposing a tough action in an election year, balanced Budget in the next But the delared Presidential fiscal year, starting in October, candidates were dismissive, Republicans compleining that he The business community, in had done "too little, too late," particular, feels that by not and should have cut, rather than making more severe reductions increased, taxes; and Senator in Government spending the Edward Kennedy saying that the burden of the package would

The political response is ductivity. At the weekend important because Congress is empowered to spprove much of the fiscal part of the package. Initial reaction was thet Congress might cut spending more deeply than Mr. Carter proposed but this sentiment may not bold up when the details of the cuts are made public later this month.

Although this is denied by Administration officials, the decision to defer publication of the details has a political rationale. The budgetary are is likely two of which, Illinois and New York, hold significant Presiden tial primary elections in the next eight days. New detailed economic fore-

casts will be unveiled at the end of the month. Officials yesterday were fairly defensive unspecific about their estimates of the impact of the package on economic ectivity.

Mr. Charles Schultze, chairman of the Council of Economic Advisers, projected en 11.75 per cent increase in consumer prices this year, 1 per cent up on January'e estimates; unemployment rising to 7.1 per cent, against 7.5 per cent in the January calculations; and an overall contraction in gross national product for the year of 0.5 per cent, not, as pre-viously projected, I per cent. But of course the budgetary cuts will begin to be felt in earnest only later this year, et

Continued from Page 1

Energy

Hydro-electricity and solar power: The construction programme may include 250-350 large bydro schemes or between 5,500 and 7,500 schemes (aver-aging 100 MW). Cost: \$500bn-\$700bn (£225bn-£320bn).

Nuclear power: the construc-tion of 350-800 nuclear stations, each averaging 1.000 (£180bn-£410bn).

Natural gas: the development of 200 to 250 fields, eech capable of yielding an average of 5bn cubic matres a year. Cost: \$150bn-\$300bn (£68bn-£135bn). Coal: the exploitation of between 700 and 1,000 coal mines, each capeble of producing an everage 2.5m tonnes a year. Cost: \$150bn-\$200bnyear. Cost: (£68bn-£90bn).

Oil: the development of 350 to 500 fields, each capable of yielding an average of 100,000 a time when the economy will barrels a day. Cost: \$500buand the big industrial states, presumably be in a recession,

THE LEX COLUMN

When the collar fights back

The very first market ver-President Carter's latest anti-inflation packaage will be delivered by the will be delivered by the foreign exchange this morning, and the signs are thet it will be a favourable one. The dollar has elresdy rallied significantly in recent weeks, and whetever criticisms can be made of the measures, the fact is that the toughening of the fiscal stance and the promise of even higher end the promise of even higher sbort-term interest rates for the ime being can only ettract more funds back into dollars.
Immediately, the main impact
will fall on the traditionally

bard currency, low interest rate countries. This yield gap between, say, the deutschemark and the dollar has widened to e gulf that makes no sense to an internetional investor unless the dollar is to be very weak. Germany and Switzerland have already been cultivating OPEC support for their currencies by speedily dismantling their now embarrassing capital import berriers. And the problems of the Japanese authorities. are compounded.

The measures themselves are the usual mixture of the effec-tive and the cosmetic, though they certainly do not count as a damp souib. The new oil tax, for example, will act almost at once, while the Federal Reserve Board has at last tightened np on access to the discount "window," and brought nonmember banks more effectively under its control. On fiscal policy, the promise to balance the 1980-81 budget is fine as a statement of intent, though there is room for plenty of longer term bonds can hold scepticism over implementa current levels may depend on tion. For instance, the deficit precisely how high dollar short on original assumptions bad rates go. DM and Swiss Franc already swollen drastically bonds are likely to come under on original assumptions bad already swollen drastically since first publication in pressure. In London, gilt-edged January. The voluntary responders appeared to be respond-January. The voluntary respires appeared to be responding traints on loan growth lack fulling positively on Friday aftercredibility, but they are hacked moon to hopes of a tough Carter np by penal reserve requirements. The curbs on loan finance for takeovers, inci-dentally, could be a nuisance

for European companies used to financing American acquisi-tions through the U.S. banks. The fiscal target is likely to contse if it is to be achieved, and the big danger is that the budgetary stance will be weakthe economy will need to be bailed ont. For instance, the

The snap judgment is that short-term money will cost even more at first, but the peak will be brought closer, and the risk of a long, gradually escalating crisis will have been greatly reduced. Penal money costs, and the restrictions almed directly at speculative dealings, will lead to a further shake-out in the com-modity markets, which - have already seen very substantial falls. U.S. equities, too, are likely to prove vulnerable, and this is bound to influence other

demonstrate what the new

policies mean in terms of day

to day open market operations

of speculetive liquidations may not be directly relevant: As for bonds, the credibility of the package will be the most important factor. Whether U.S. package, and the market should not have been disappointed. But it is unlikely that there will be any major move so close to the UK Budget

equity markets around the world, even though the problem

Sea Containers

Some of the fastest-growing U.S. companies over the last decade have been involved in leasing containers and container sn been undertaken through a sectors with kid gloves; they have been exempted from the tightening of consumer credit.

It is now up to the Fed to was forcing if to sell off more are few.



not going to be the last bis borrower to suffer from the U.S. anti-induction programme,

The key to ancessful ship, owning a secure financing and Sea Containers is finding that the lardsh use of floating rate dollar debt is putting pressure on its income account; lease rates are not high enough to leeve e proper margin. What tha private C. Y. Tung group which can apparently pay our £1121m for Furness Withy with out overmuch concern that the ESm or so pre-tax that Forness might make this year will still leave a deficit. This could be of the order of £10m on the basis of current short-term dollar rates (though Tung's actual financing plans remaio obscure).

Normal historical ccounting, of course, is of only ilimited relevance to floating assets like ships. It makes no sense that a U.S. owner borrow ing dollars can be making a loss when a Swiss operator bottowing Swiss francs can be comfortably in income surplus. But bankers do not like their custo-sbortfell—and these are not the kind of economic circumstances in which banks can easily be persuaded that ships and containers are going to increase their capital value.

The turnover of Sea Con first companies in the field in 1985, bas expanded from \$100,000 to \$157.8m. But the rate of growth, in Sea Containers as in the other containers, has required beavy borrowings—usually against specific specific particles of the party by the pa assets purchased. At the end of the year Sea Containers. debt/equity ratin was nearly 3:1, and 64 per cent of the debt -\$292m was tied to floating rates, making it extremely the nerable to high interest there especially when, as now, iner is overcapacity in confi

The other two independents: ing. Flexi-Van began last with debt 21 times stockholders funds, while Xtra ended it with a 1.8:1 ratio. And there are signs bailed ont. For instance, the strains in the financial sector are going to be acute, and it is already evident that the U.S. straction. On Thursday Sea Is already evident that the U.S. s fraction. On Thursday, Sea rates in the U.S. could take s Government is having to handle Containers, the world No. 2 long time to come down the housing and automobile after CTI in terms of container Further take-overs could prove market share, announced that the way out, although the number of companies that can take \$300m or so of debt on board

£50,000 £500,000

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